

This manual is intended for experienced service personnel. Servicing electrical circuits can be hazardous. Use all caution if "live" tests are performed. This manual should be used with the electrical-mechanical troubleshooting guide.

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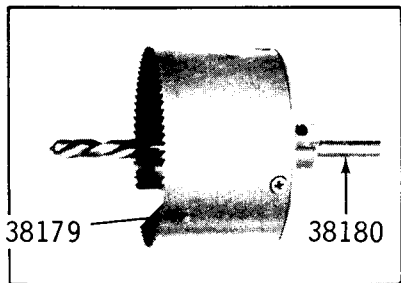
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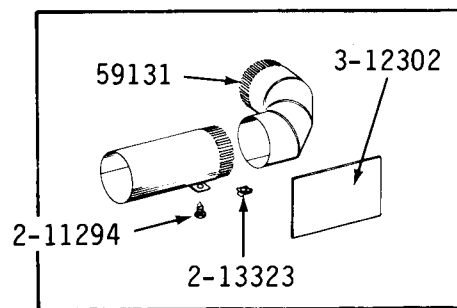
# INSTALLATION ACCESSORIES



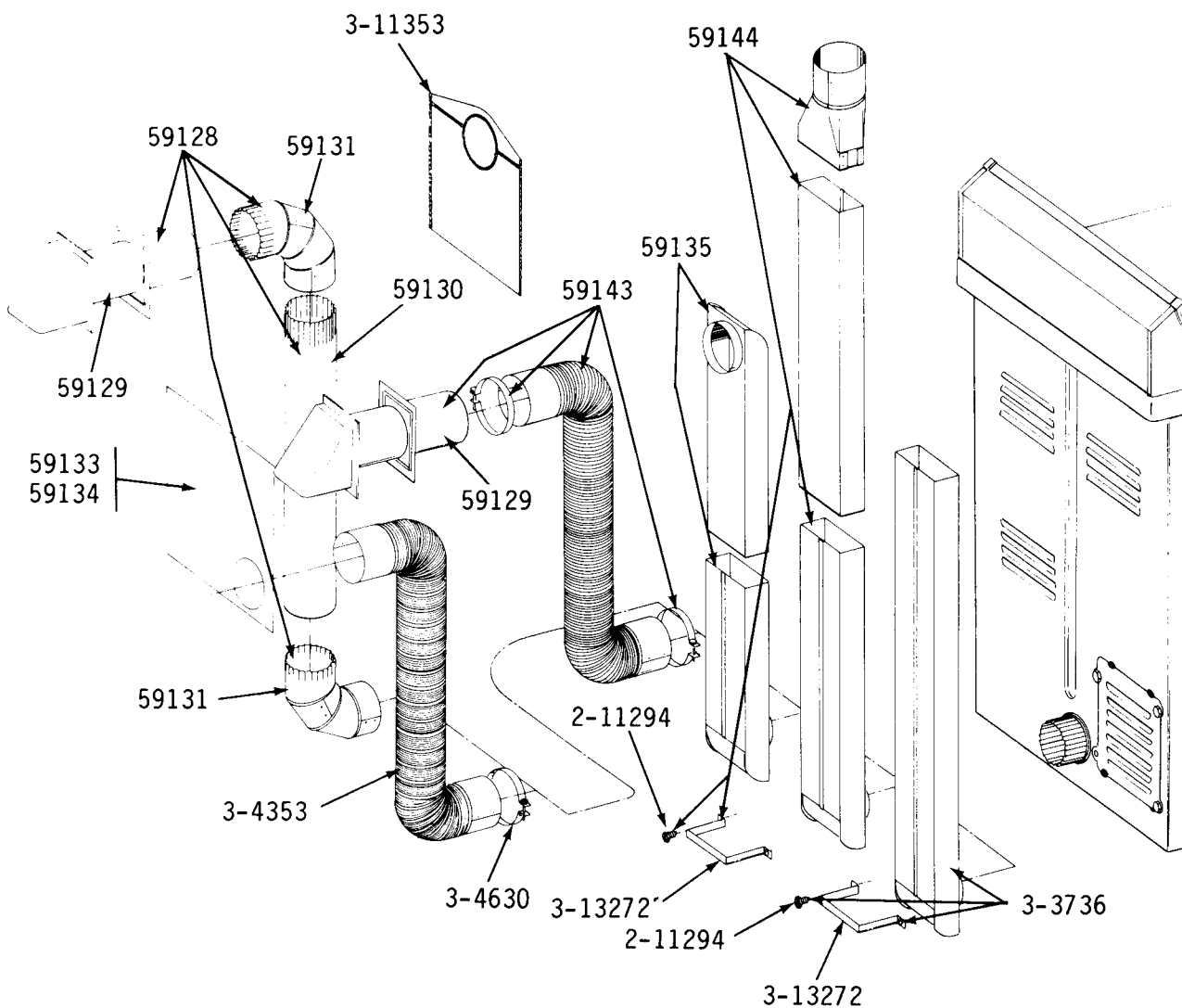
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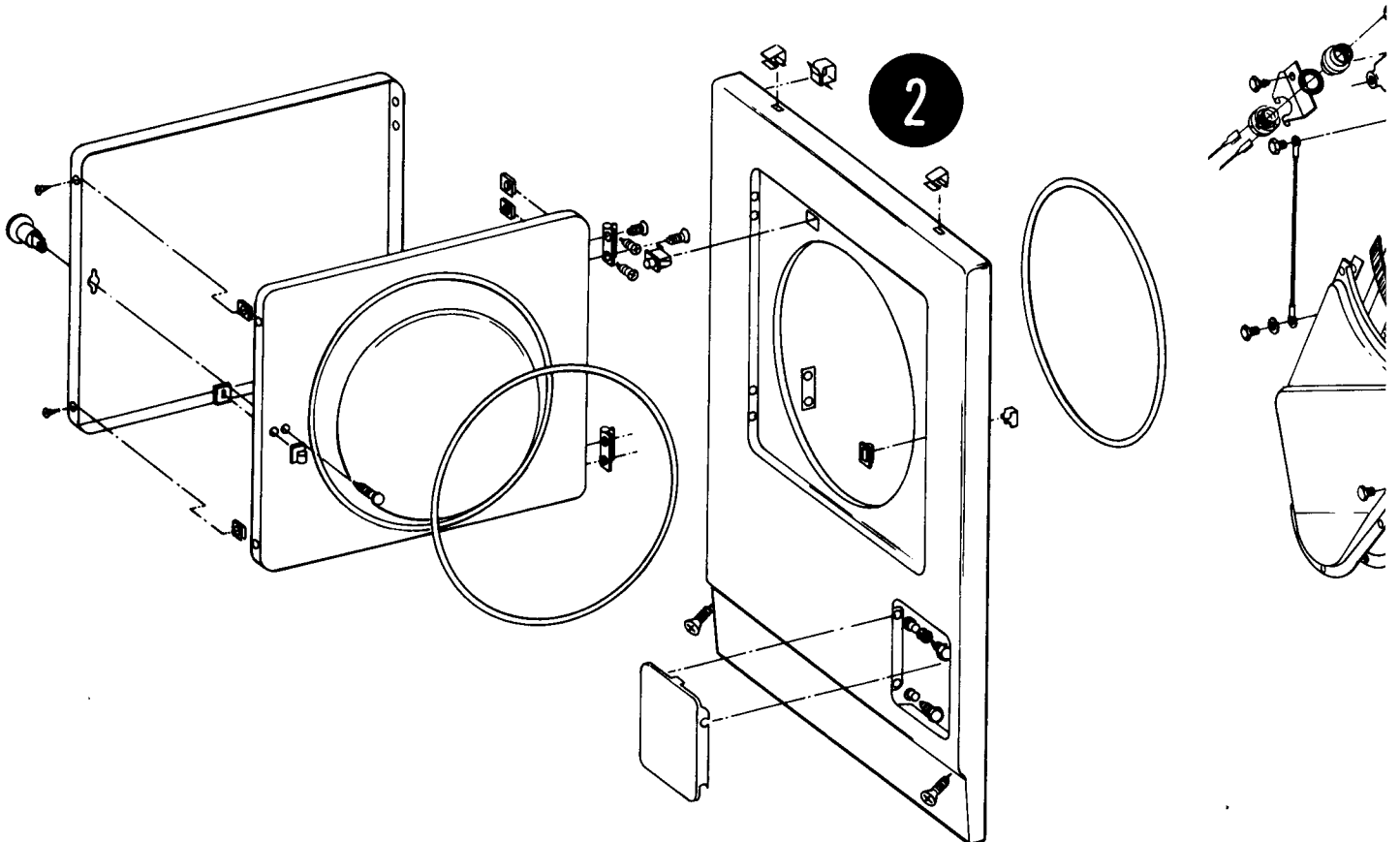
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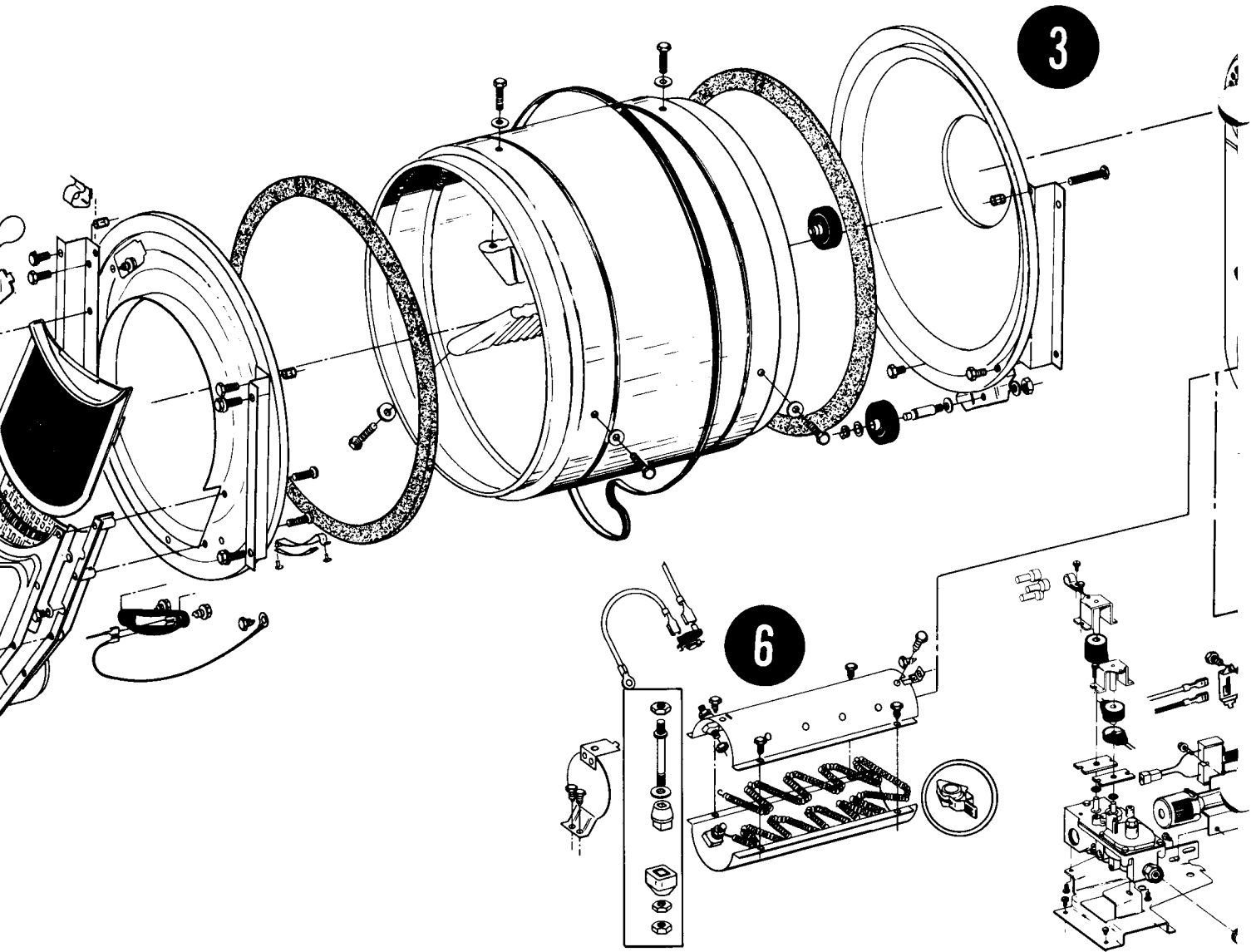
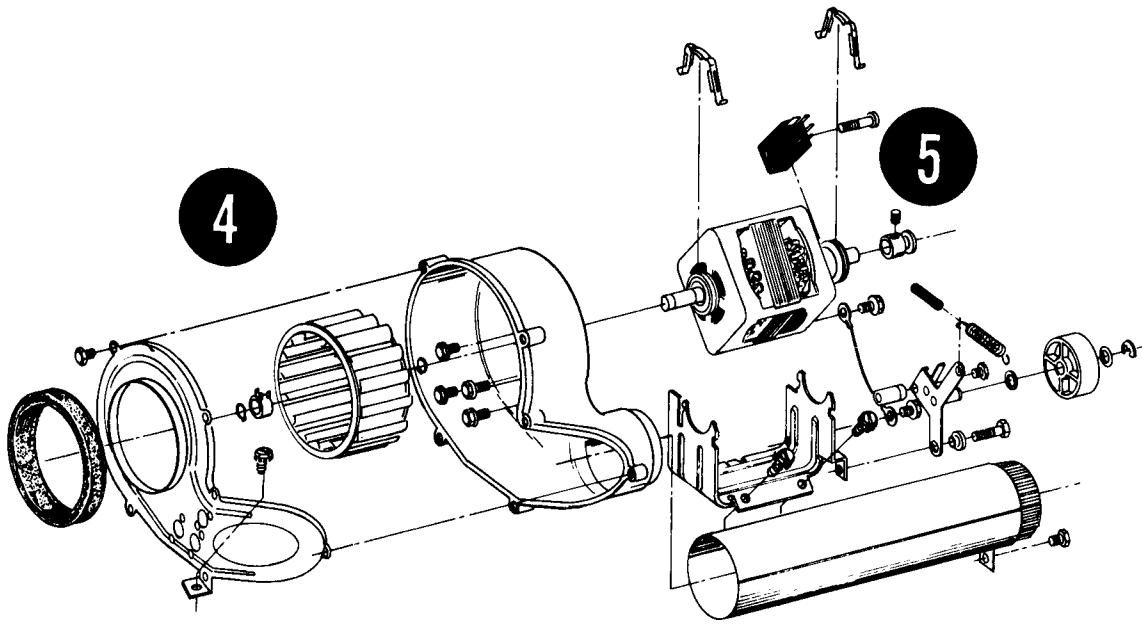


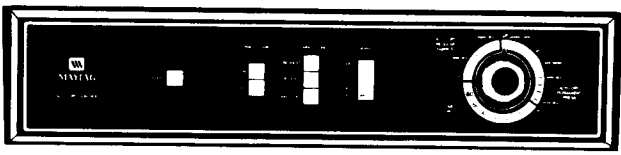
38179 Blade for saw  
38180 Replacement drill  
38766 Hole saw with drill  
38767 Extension for saw  
59128 Vent kit - standard 4" (10.16cm) kit contains three 59130 4" x 24" (10.16cm x 60.96cm) aluminum pipes, two 59131 4" (10.16cm) aluminum elbows and one 59129 4" (10.16cm) vent hood  
59129 Vent hood - 4" (10.16cm) wide-mouth  
59130 Aluminum pipe - 4" x 24" (10.16cm x 60.96cm)  
59131 Aluminum elbow - 4" (10.16cm)  
59133 Aluminum window plate - 12" x 18" (30.48cm x 45.72cm)  
59134 Aluminum window plate - 15" x 20" (38.10cm x 50.80cm)  
59135 Vent duct assembly - 18" (45.72cm) to 30" (76.20cm) long  
59143 Flexible aluminum vent kit - includes one 4" (10.16cm) vent hood, two 4" (10.16cm) clamps and one 4" (10.16cm) dia. x 8' (2.44m) flexible vent duct  
59144 Rectangular vent kit with round adapter  
2-11294 Screw - for exhaust duct kit  
                  - for exhaust deflector kit  
2-13323 Fastener for exhaust duct kit  
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3-4353 Flexible aluminum vent duct - 4" x 32" (10.16cm x 81.28cm) length stretches to 8' (2.44m)  
3-4630 Clamp for flexible duct  
3-4652 Exhaust duct kit for side and bottom venting  
3-11353 Dacron lint bag  
3-12302 Insulation for exhaust duct kit  
3-13272 Bracket for exhaust deflector



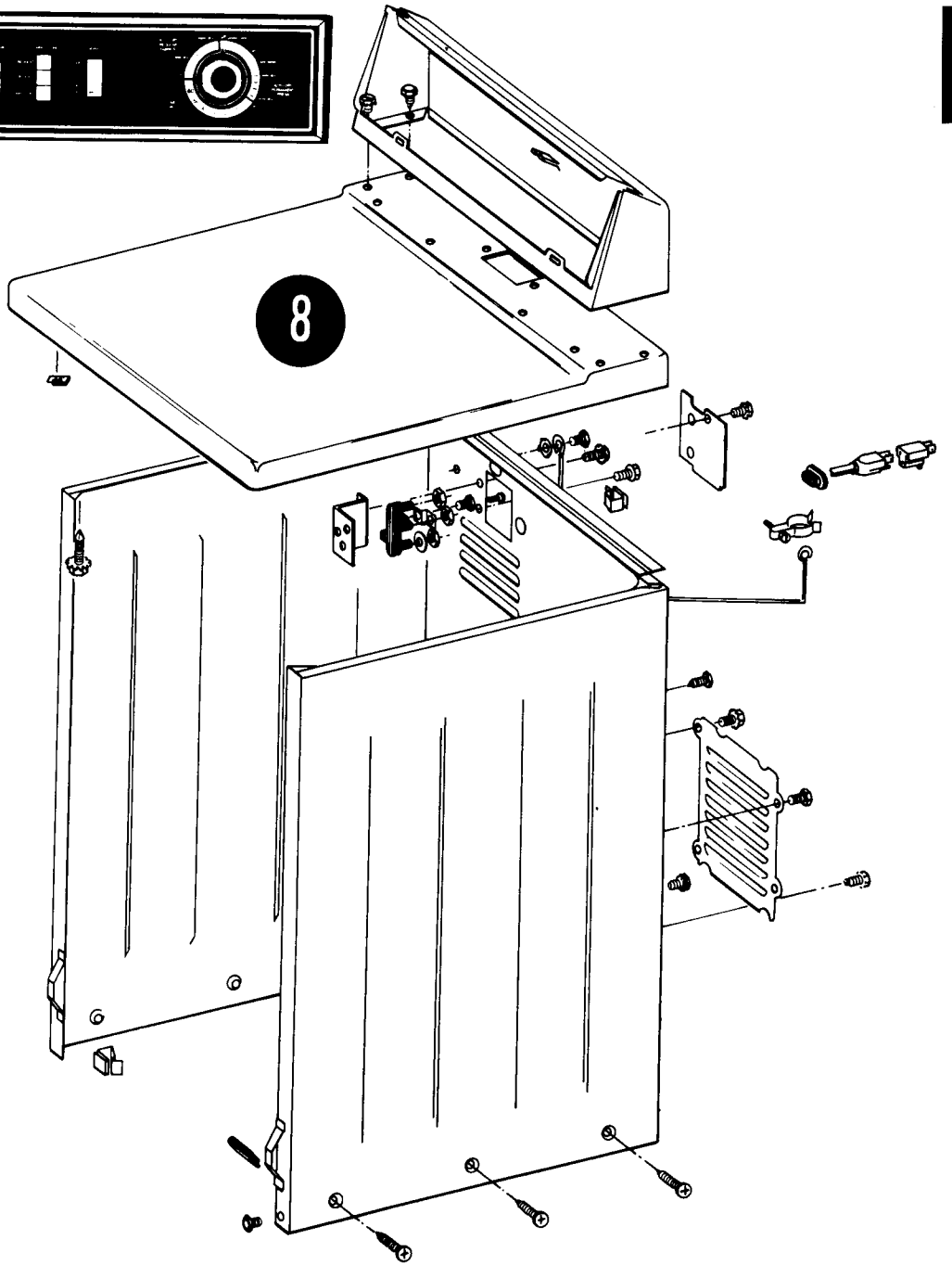
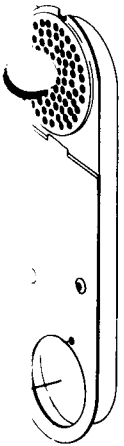
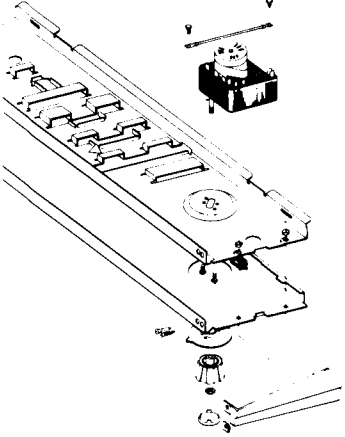
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- 4 Blower, Regulating and Cool Down Thermostats**
- 5 Drive Motor and Idler**
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- 7 Gas Valve**
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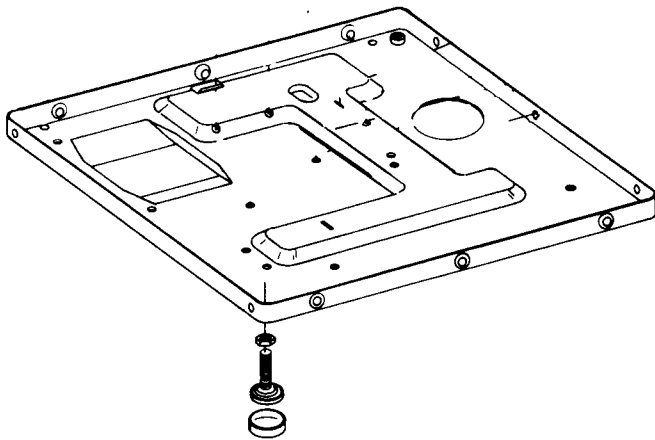
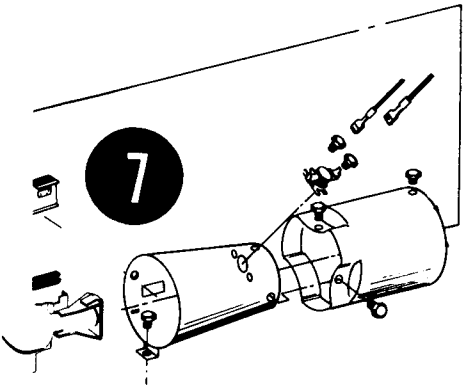


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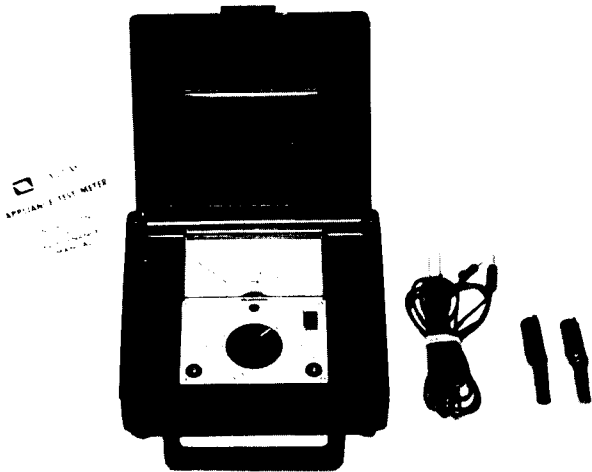




# Section 1

## Electrical Test Equipment

### (38559) MAYTAG APPLIANCE TEST METER



The Maytag appliance test meter is most effective when used to detect open or closed circuits in an electrical component. This method of testing is often referred to as "continuity testing" and is the easiest means of checking a part.

A continuity check can be safely made only after the unit being checked has been disconnected from its electrical supply and after you have removed wires from the terminals of the part being tested. Following manual activation of the part (if required) and after the meter has been set on an ohms scale, the probes of the test meter are placed on the respective terminals. Needle movement to the "0" end of the scale would indicate continuity through the part. No needle movement would indicate no continuity and a probable inoperative part.

In general, when checking for continuity, needle deflection indicates a closed circuit and no needle deflection would indicate an open circuit.

### OHMS (RESISTANCE MEASUREMENTS)

When checking resistance be certain the unit is disconnected from its power supply. Failure to do so will result in meter damage when performing checks. For accurate readings, wires should be disconnected from both sides of the component.

#### SET METER FOR USE AS FOLLOWS:

1. Calibrate meter by touching test probes together and turning adjusting dial until meter reads "0" on green scale. Recheck calibration whenever scale is changed. (Replace battery if dial will not bring meter reading to "0".)
2. Select the scale most easily read and place test probes on respective terminals. When checking a switch the reading would normally be either open or closed. A reading of 70 on the R x 10 scale would for example be 700 ohms resistance.

The following chart shows typical resistance values for some of the components found on Maytag dryers.

**Heating Element** 10.23 ohms

#### Gas Valve

Disconnect radiant sensor and igniter wires. Measure across igniter wires or igniter plug from valve to get a resistance value of 425-450 ohms.

Measure across sensor wires to get a resistance of 450-475 ohms.

#### Drive Motor

Red terminal to Gray terminal 1.5 ohms



In order to measure the individual windings the red and gray wires will have to be pulled off of the start switch.

Run winding only	2.25 ohms
Start winding only	3 ohms

### Glow Bar Igniter

Because of the make-up of the igniter, the resistance will vary over a rather wide range. Values from 180 ohms to 400 ohms would be typical with an igniter at room temperature.

### Shut-Off Solenoid — Electronic Control Models

50 ohms — 55 ohms

These resistances are not meant to be used as the exact values to determine whether a component is good or bad. They are provided so that you may have an idea of the resistance that you can see in testing components on Maytag dryers.

## VOLTAGE CHECKS

For the most part these checks will consist of taking readings at the wall receptacle in order to determine the availability of voltage to the product. Voltage checks on individual components of a product are not recommended due to the possibility of electrical shock. Component part testing is best accomplished through continuity checks with a 38559 Maytag appliance test meter.

NOTE: Use of the meter on voltage higher than indicated range may cause permanent damage to the meter. To prevent damage first select highest range and then lower for readings which fall within the lower scale.

### SET UP METER FOR USE AS FOLLOWS:

1. Turn selector knob to desired meter function and appropriate range.
2. Plug black lead into socket marked - (black).
3. Plug red lead into socket marked + (red).
4. Place test leads into receptacle in order to determine voltage available.

## TEMPERATURE READINGS RANGE (50°F. TO 300°F.)

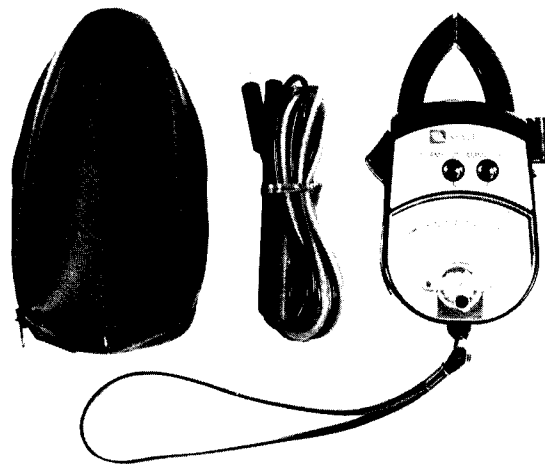
Dryer — Air temperature readings can be taken at the lint filter by removing the filter and placing the

accessory temperature probe (Part No. 38562) directly in the lint filter opening. Cycling of the thermostats can actually be observed as can the temperature of the exhausted air.

### SET UP METER FOR USE AS FOLLOWS:

1. Turn selector knob to TEMP.
2. Insert black negative lead of temperature probe into socket marked - (black).
3. Insert red positive lead of temperature probe into socket marked + (red).
4. To calibrate meter, touch black plug from red positive lead to black negative lead and turn calibration dial until needle aligns with CAL.
5. Probe is ready to use — read blue scale on meter face marked TEMP.

## (38186) Clamp-On-Ammeter



Each circuit in an appliance has a "normal" current draw which is an indication of the performance of that circuit. Current draw levels less than or more than normal give clues to malfunctions. The clamp-on ammeter measures these currents without breaking the circuit by measuring the strength of the magnetic field developed around each conductor. Current is read by separating the conductors and clamping the jaws of the ammeter around each conductor on which current is to be read. Low amperage readings indicate problems such as damaged heating elements, excess belt slippage, etc. High amperage readings indicate the unit being tested is operating under an increased mechanical or electri-

cal load. Worn parts or low voltage will show up as low amperage readings.

NOTE: Overloads on a circuit breaker or fuse can be traced to the product being tested or the circuit breaker (or fuse) by checking the product's current draw. If the amperage reading is less than the breaker reading, the breaker or fuse box is at fault.

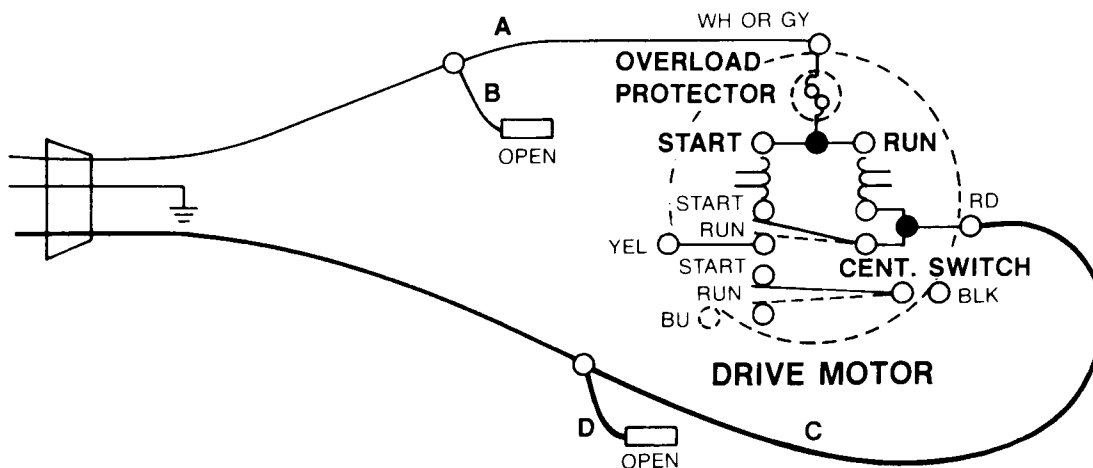
## USE OF AMMETER ON DRYER

There are two currents of concern to us in an electric dryer; the heating element current and the drive motor current. These currents can be measured by use of a "split line cord" extension for the dryer cord or by attaching the ammeter to the respective power line wires at the dryer terminal block. Current measured should be 21 amps on the heating element side of the line, 24 amps on the drive motor side of the line and 4 amps on the center or neutral line.

### (38183) Motor Test Cord



The motor test cord may be used to electrically check operation of the drive motor while still installed in the unit. Testing of the motor in this



manner determines whether or not it will run independently of other electrical components.

Two test leads are required to check operation of the drive motor. To check the motor for running, hook up test cord as shown.

Location of terminals on motor may vary from drawing.

## CHECKING HEAT CONTACTS MOTOR CENTRIFUGAL SWITCH

1. Disconnect dryer power source.
2. Gain access to motor and remove blue and black leads from motor switch.
3. Use either of the following test methods using appropriate caution.

### A. Live test — use caution

1. Using a 2-1110 wiring coupler, connect blue and black wires removed from motor switch.
2. Reconnect dryer to power and set for heat cycle.
3. Start dryer, if heat is produced, replace motor switch on motor. If no heat, continue additional circuit checks.

### B. Continuity Check

(Insulate wires removed from motor switch.)

1. Using clip adapters supplied with the Maytag Appliance Test Meter, attach meter probes to the blue and black motor switch terminals.
2. Arrange probe leads away from any moving parts and set meter on RX1 range.
3. Reconnect dryer to power source and start dryer, continuity on meter indicates good switch. No continuity, replace motor switch or motor.
4. Open door to stop dryer. When motor stops, motor switch contacts must open, if not replace switch or motor.



# Section 2

# Electrical-Mechanical Troubleshooting

## WILL NOT RUN

### Dryer won't start or run.

All wires are hooked up to their corresponding terminals. \_\_\_\_\_ Dryer is plugged in. \_\_\_\_\_ Blown fuse or circuit breaker.

Door switch. \_\_\_\_\_ Push-to-start switch. \_\_\_\_\_ Timer. \_\_\_\_\_ Start control switch.  
Time and auto dry models. Time and auto dry models. Electronic control models.

Cool down thermostat \_\_\_\_\_ Drive motor.  
D712 only.

### Drive motor runs — drum won't turn.

Belt off or broken. \_\_\_\_\_ Motor pulley loose or off. \_\_\_\_\_ Idler tension spring. \_\_\_\_\_ Idler pulley.

### Dryer runs a few minutes and then stops — Motor overload protector opens.

Lint build-up around drive motor. \_\_\_\_\_ Low voltage. \_\_\_\_\_ Blower impeller blocked. \_\_\_\_\_ Drive motor.

### Check cool down thermostat — D712.

## Dryer blows fuses or trips circuit breaker.

### ELECTRIC MODELS

The amperage readings are at 240 volts. One line will be 24 amps and the other line will be 21 amps. The neutral line will be at 4.5 amps. If you have the above amperage readings, the problem is not the dryer. Check the fuse box, circuit breaker or house wiring.

Shorted heating element.

Incorrect wiring or a wire shorting to ground.

### GAS MODELS

During ignition the dryer will draw 7 amps. With the burner on, the dryer will draw 4.5 amps. If the dryer is drawing the above amperage and the fuse blows, the problem is not the dryer. Check the fuse box, circuit breaker or house wiring.

Igniter.

Drive motor.

# WILL NOT DRY

## Dryer won't heat (motor runs).

### ELECTRIC MODELS

Blown fuse or tripped circuit breaker.

Open heating element.

Hi-limit thermostat.

Regulating thermostat. \_\_\_\_\_ Temperature selector switch.

Drive motor start switch

### GAS MODELS

Gas available.

Igniter.

Radiant sensor.

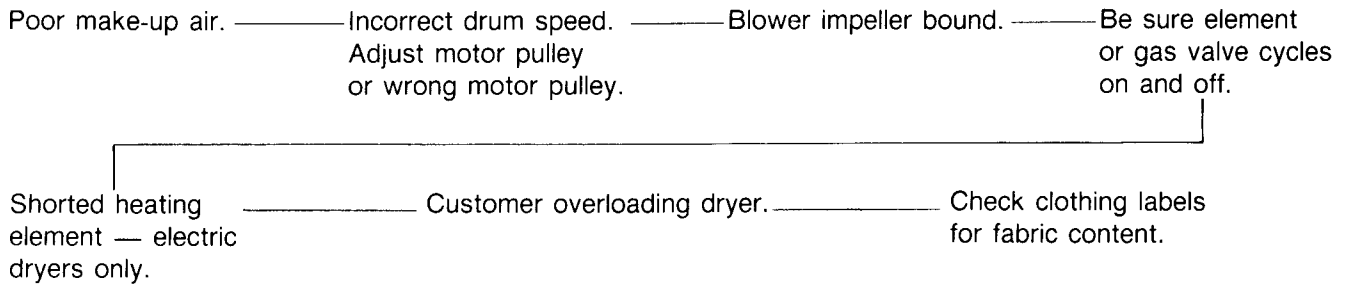
Gas valve.

Timer auto dry and time models.

Cycle selector switch D608, D808, D710.

## Improper Drying — Clothes Wrinkled — Harsh — Taking too long

Lint filter is clean. — Restriction in exhaust. — Exhaust hood door stuck. — Exhaust too long. —

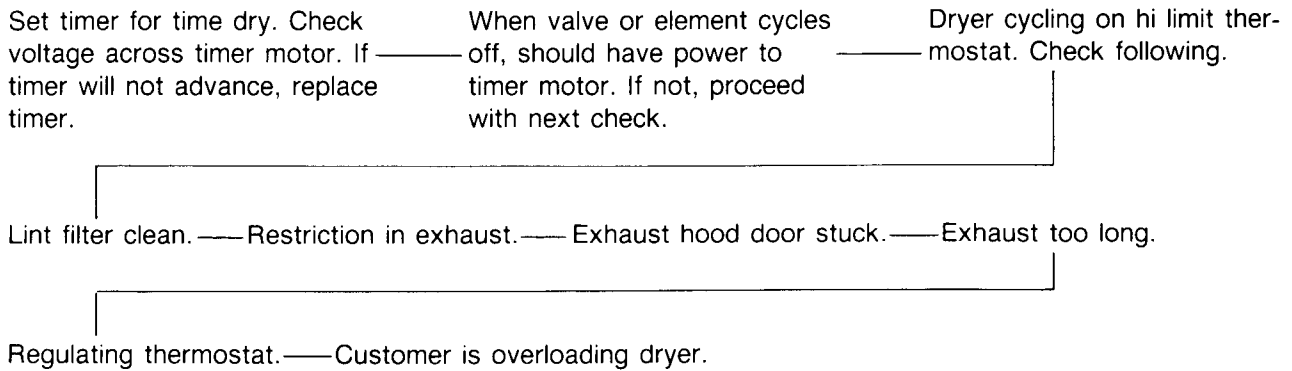


# WILL NOT SHUT OFF

## Time Dry Models

Timer motor — Timer

## Auto Dry Models



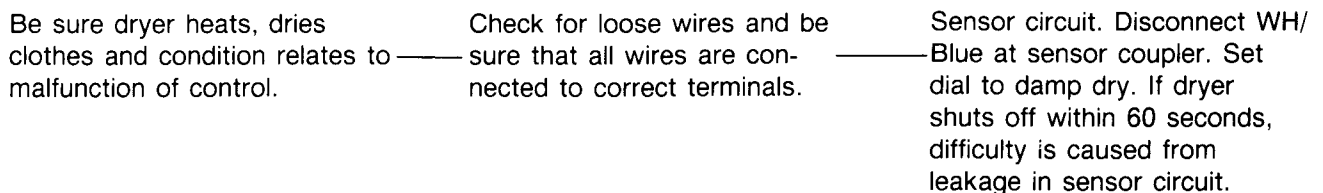
## WON'T SHUT OFF ON AIR FLUFF. — D510

Dryer will shut off on air fluff only when the timer is set to Time Dry.

## ELECTRONIC CONTROL MODELS D608, D710, D712, D808, D810

### DRYER WON'T SHUT OFF. "SOLENOID NEVER ENERGIZES."

#### D608, D808



Shut-off solenoid. Unplug dryer and check for continuity between the two solenoid terminals.

Cycle selector switch. See Electrical Section for switch tests.

Edgeboard connector with capacitor. Set dryer to regular cycle and start unit. While dryer is operating observe neon bulb. If neon bulb flickers, replace edgeboard connector with capacitor.

Electronic control board.

### D710, D712, and D810 Dryers, Permanent Press and Regular.

Be sure dryer heats, dries clothes and condition relates to malfunction of control.

Electronic control board. Insert 38204 electronic control test board. Start dryer. If dryer shuts off in approximately 10 seconds, replace electronic control board.

Edgeboard connector with capacitor. Start dryer. While dryer is operating observe neon lamp. If neon bulb flickers, replace edgeboard connector with capacitor.

Sensor Circuit. Disconnect White/Blue wire at coupler and start dryer on regular setting. If dryer shuts off in 12 to 15 minutes on dry or 18 to 22 minutes on 'more dry', difficulty is caused from leakage to ground in sensor circuit.

Shut-off solenoid. Unplug dryer and check for continuity between the two solenoid terminals.

Start control switch. With dryer unplugged and dial set on regular, depress push-to-start button. Check for continuity on the start control switch between terminals White/Red to Orange on D710 dryers. On D810 dryers, check for continuity between terminals White/Red to Orange/Black on start control switch and on D712, between White/Red 31 and Yellow 35. No continuity, replace start control switch.

Dryness control switch. Check for continuity between dryness control switch terminals. With normal dry button depressed, you should have continuity.

### DRYER WON'T SHUT OFF "SOLENOID ENERGIZES". — D608, D710, D712, D808, D810.

(Except when permanent press with adjustable press care is selected on models D712-D810)

#### D608, D808

Check to be sure selector switch tab is not broken off. If tab is broken, replace selector switch. After replacing selector switch, check for bent solenoid bracket. If bracket is bent, bend bracket slightly upward.

#### D710, D712, D810

Check to be sure start control switch tab is not broken. If start control switch tab is broken, replace start control switch. After replacing start control switch, check for bent solenoid bracket. Bend bracket up if bent.

Shut-off linkage. Check for off or broken shut-off solenoid linkage.

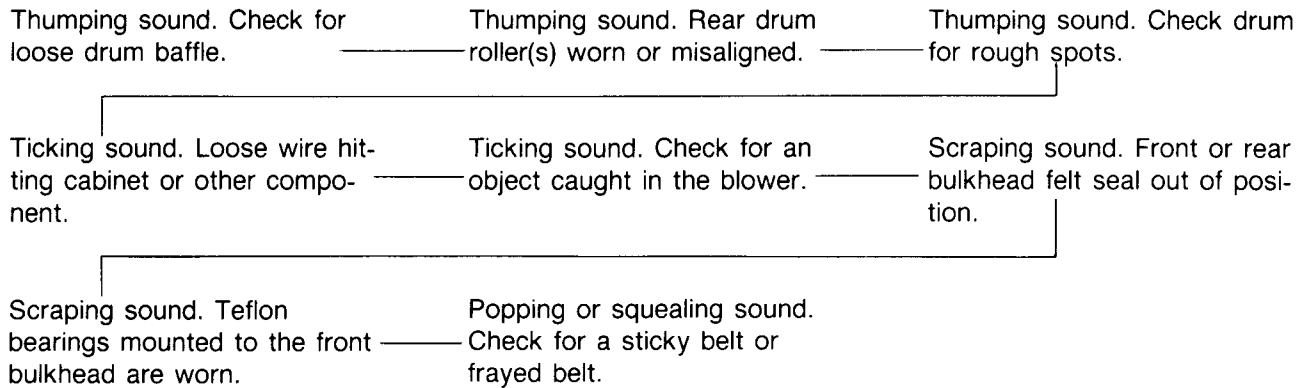
Bent solenoid bracket. If heat stays on, check for bent solenoid bracket.

Cool-down thermostat.

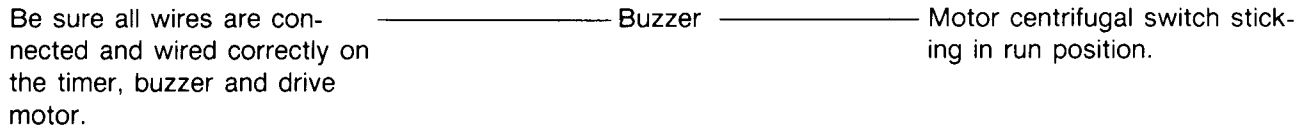
Selector or start control switch. Check switch per schematic of dryer being serviced.

# MISCELLANEOUS

## Dryer noisy.



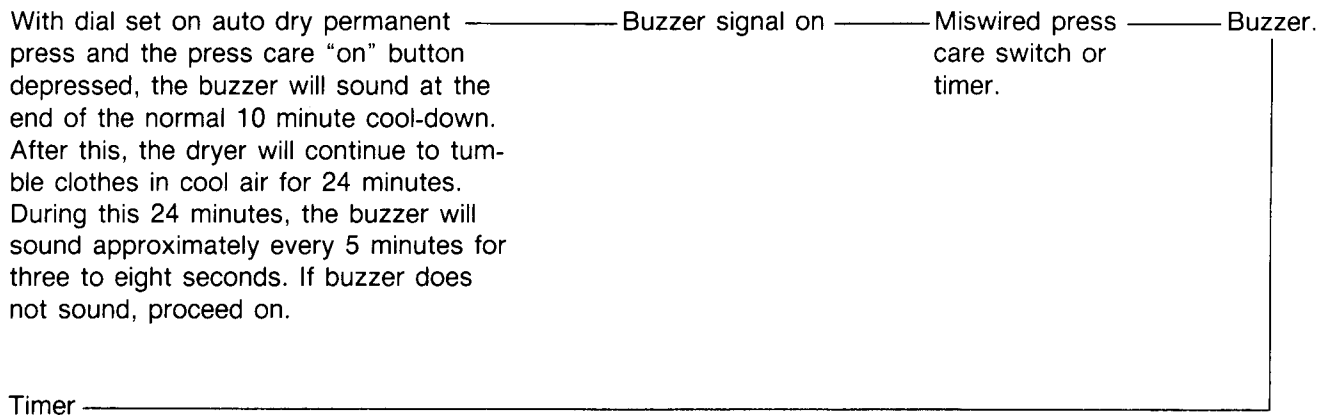
## Buzzer will not buzz at end of cycle. (Auto dry Models)



## Buzzer stays on too long or goes off too quickly. (Auto dry Models)

Length of time the buzzer stays on is dependent upon the time it takes the motor to slow down, allowing the motor switch to reset. The normal time increment is between 2 and 3 seconds.

## Buzzer will not buzz during Press Care Setting (D610-D612 Dryers).



**Buzzer will not periodically buzz during permanent press cool down (D512) \_\_\_\_\_ Timer**

**MISCELLANEOUS Pertaining to Electronic Control Dryers**

**Dryer shuts off before clothes are dry.**

Dryer should be externally grounded. \_\_\_\_\_ Sensor circuit open. \_\_\_\_\_ Broken ground strap.

Loose wire connections or incorrect wiring. \_\_\_\_\_ Capacitor & edgeboard connector assembly. \_\_\_\_\_ Electronic control board.

**Timer will not advance during permanent press with Adjustable Press Care (D712 and D810).**

Shut off solenoid must energize before timer will advance. \_\_\_\_\_ Check for incorrect wiring or wire off. \_\_\_\_\_ Timer motor.

Timer. Check for continuity between timer terminals black and pink/black on D810 and on D712 between black and yellow. \_\_\_\_\_ Start control switch. Check for continuity between start control switch terminals pink/black and red/black on D810 and D712.

**Time will not advance during Time Dry (D712)**

Timer-check for continuity between black and pink. \_\_\_\_\_ Timer motor.

**Repeating chime does not ring — Permanent Press Cycle.**

Dryer must proceed to "cool-down" before repeating chime will ring. Repeat chime switch must be "on".

Cycle selector switch with dial set on Permanent Press. Check for continuity between pink to red/black on D710 dryers cycle selector switch. On D608 and D808 check for continuity on switch between gray and blue. When making this check on D608 and D808 dryers, the selector switch should be in the off position.

Start control switch. Check for continuity between terminals pink/black and red/black on D710 dryers. On D712 and D810 dryers, check between blue and white/brown on the start control switch with the switch in the off position.

Timer D810. Check for continuity between orange and brown timer terminals. On D712 check for continuity between brown and white/brown. \_\_\_\_\_ If problem is not found in above checks, replace electronic control board.



## Repeating chime does not sound during Permanent Press with Adjustable Press Care Setting (D712 and D810 dryers).

The chime will sound during this setting every 8 minutes until the last 2-3 minutes. During the last 2-3 minutes, the chime will sound every 30 seconds until completion of the cycle.

Chime switch (D810) only. Be sure switch is on. With switch on, no continuity between terminals.

Start control switch. After solenoid energizes unplug dryer and check for continuity between pink to white/blue and pink/black to red/black on start control.

Timer. With Press care selection made, check for continuity between timer terminals white/blue to brown on both the D712 and D810. On D712, also check from black to yellow and on the D810 check from black to pink-black.

If problem is not located in above checks, replace electronic control board.

## Chime not loud enough.

Check to be sure chime actuator assembly is not broken or loose.

Assuming everything is all right, the sound level of the chime cannot be changed.

## Clothes not dry enough.

Be sure dryer is operating efficiently and controls are working properly.

Without a load of clothes in the dryer and the normal dryness selected, the dryer will shut off in approximately 14 minutes. With extra dryness selected, the dryer will shut off in approximately 22 minutes. If the dryer does not shut off according to the times listed, proceed on.

Temperature and dryness switch. On D608 and D808 dryers check for continuity between Gray 3 and Yellow 6 on temperature and dryness switch. On normal dryness there will be continuity and on extra dryness there will not be continuity.

Dryness switch on the D710, D712 and D810 dryers. Check for continuity between the two switch terminals. On normal dry you will receive continuity and an extra dry you will not.

If dryer is operating as intended and customer prefers clothes drier, advise customer on aspects of electronic control dryers and how they dry the clothes to a certain dryness level.



# Section 3

## Service Procedures

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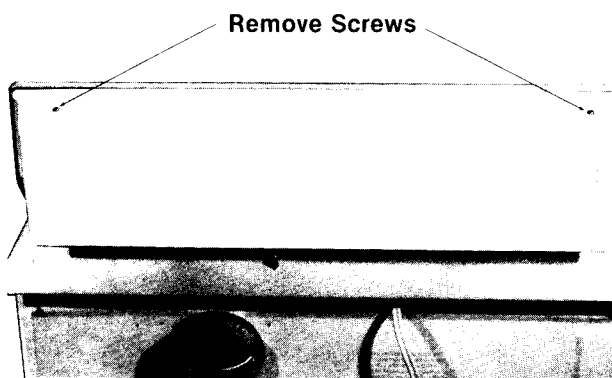
# Section 3

## Service Procedures

### Access to Control Panel Components

#### "08" MODELS

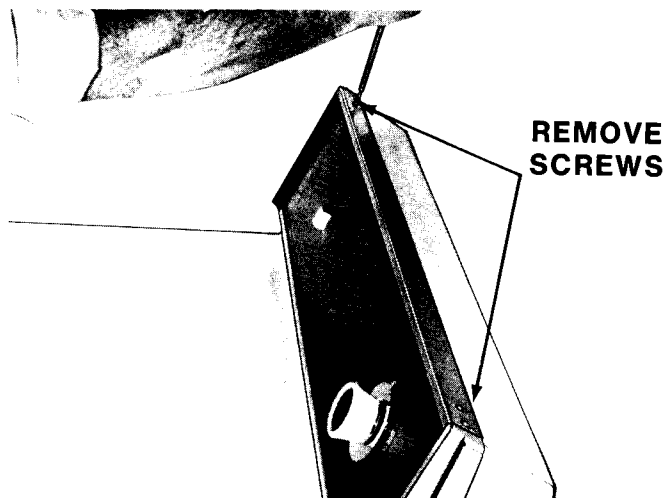
1. Remove screws holding control cover to bracket.



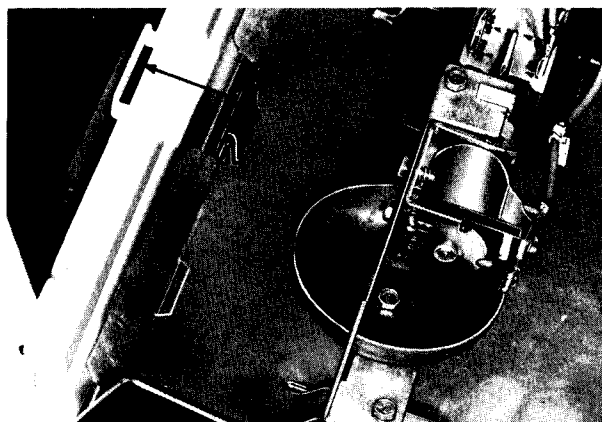
2. Lift control cover from dryer.

#### "10" and "12" MODELS

1. Remove inner screws.



2. Tip control panel assembly forward.  
NOTE: When reinstalling, engage tabs on backup plate in slots of console.



# Control Panel Assembly Components

## TYPES OF CONTROLS

There are three basic types of controls used to determine the operating time of Maytag dryers; they are Timer, Automatic Control and Electronic Control.

## TIMER CONTROL

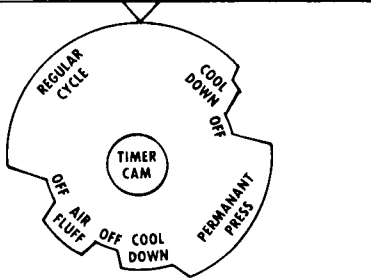
### MODELS DE91, D106, D107, D308, D110, D210, & D212

These models utilize an electrical timer which the user sets to the number of minutes recommended in the operating instructions or as experience indicates necessary.

The timer knob and dial are attached to the timer shaft. At the other end of the shaft is a cam which controls both the drying time and the cool-down.

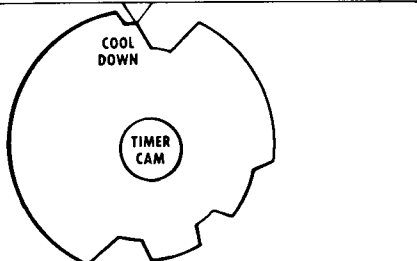
With the timer set at 20 minutes as shown in the drawing the circuit is completed through the timer to the drive motor and heater circuit.

**HEATER**  
**MOTOR**  
**POWER**



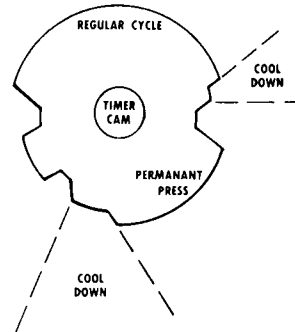
As the timer advances to the off position, the switch arm drops into step one. This breaks the circuit to the heater. Since the circuit is still made to the drive

**HEATER**  
**MOTOR**  
**POWER**



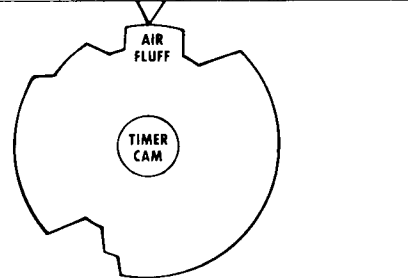
motor, the tumbler will continue to rotate and the air will continue to be pulled through the tumbler cooling the load before the dryer shuts off.

The length of the cool-down period depends upon the cycle selection. Permanent Press has an extended cool-down to lower the temperature of the garments so as to minimize wrinkling which would result from the warm garments coming to rest at the bottom of the tumbler.



When an air fluff selection is made, only the circuit to the drive motor and timer motor is made.

**HEATER**  
**MOTOR**  
**POWER**



## AUTO DRY MODELS

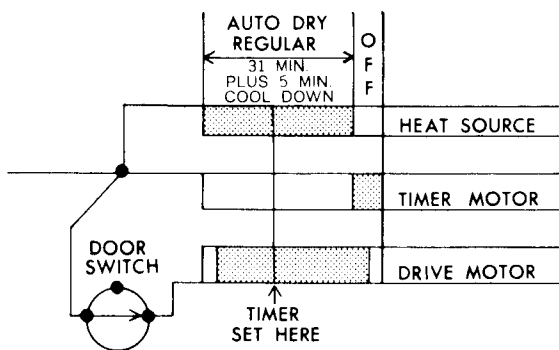
### MODELS D309, D408, D409, D410, D510, D610, D312, D412, D512, & D612

The auto dry models operate on the principle that as long as the load being dried is damp, and rapid evaporation is taking place, the temperature of the dryer and exhaust air will remain relatively low. It also follows that as the load gives up moisture and the rate of evaporation slows down, less BTU's or heat is used in evaporation and the temperature of the load and exhaust air increases. With this in mind, let's look at the circuitry.

When the timer is set to a degree of dryness, the circuit is completed to the heat source and the drive motor. The difference between this control and a standard timer operated dryer is the fact that the timer motor is not initially in the circuit.

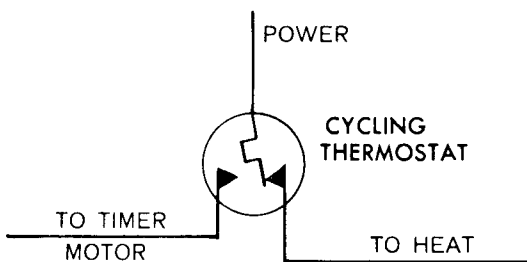
To see how the control works, let's assume that the load to be dried is a normal load with the garments of somewhat uniform weight, the auto regular setting is selected and the dial set on the middle mark between "more dry" and "less dry".

As indicated in the timer schematic below, the maximum timer controlled drying time on an auto-dry regular setting is approximately 31 minutes plus a five minute cool-down. Since we set the dial to the middle mark we have set the timer at about the midpoint or for approximately 15 minutes of timed dry.



With the timer set in this position, the circuits are completed to the heat source and drive motor.

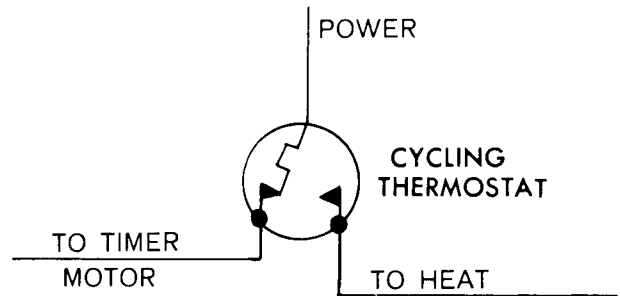
NOTE: The switch controlling the timer motor is open.



WITH CYCLING THERMOSTAT CALLING FOR HEAT (NORMAL)

At the beginning of the cycle the load is damp, the heat input is used up in evaporation of the moisture and there is little increase in the air temperature. As the load becomes drier, less heat is used up in evaporation and the temperature of the load and exhaust air starts to rise. The exhaust air is being pushed over the regulating thermostat and as the temperature of the exhaust air rises so does that of the thermostat. Once the thermostat reaches a

temperature of approximately 140°F the circuit is broken to the heat source and at the same time is completed to the timer motor.



CYCLING THERMOSTAT HAS REACHED TEMPERATURE (OPEN)

At this point the unheated air is cooling the load and the timer motor is advancing the timer towards the off position.

As the temperature of the tumbler, the items being dried and the exhaust air decrease, so does the temperature of the thermostat. When the thermostat cools to a temperature of approximately 125° the thermostat returns to its normal position breaking the circuit to the timer motor and again completing the circuit to the heating element or gas valve.

NOTE: The temperatures quoted are the operating temperatures of the thermostat and not the temperature of the clothing or exhaust air. Because of its mass, the thermostat will heat up and cool down slower than the air temperature.

Because of the moisture content and the evaporation rate, the first temperature rise and cycling of the thermostat will take a relatively long period of time. By the same token, the moisture content and the evaporation rate taking place during the first heat off period makes it shorter than subsequent heat off periods.

Each time the thermostat cycles the heat period is shorter and the heat off (timer motor on) time is longer.

In this example, after a total of approximately 13 minutes of heat off time the timer will have advanced to the point where Cam 2 closes the timer motor switch which in turn advances the timer out of the heat portion of the cycle and into the cool-down period.

A selection of the middle mark is a good starting point. Experience gained from drying a few loads

will enable the operator to pick a point, either more or less dry, which is most pleasing. Once this point is determined, it can be used for most loads as the automatic control, based upon time and temperature, will automatically adjust itself to the size of load.

If the operator is drying a poorly mixed load; bulky items such as cotton socks along with lightweight flat items it would be desirable to move the dial to the "more dry" so that more time is available to condition the load or to allow the moisture to surface on the bulky items. This is not necessary on a more uniform load of either bulky or lightweight items.

## **ELECTRONIC CONTROL MODELS (D608, D808, D710, D810, D712)**

As in the other control systems, the sole purpose of the electronic control is to shut the dryer off at the end of the drying cycle. The electronic control system reacts to moisture in the clothes to keep the dryer running until the clothes are dry.

### **START SWITCH AND SHUT-OFF SOLENOID**

The shut-off solenoid is linked to the start control switch ("10" or "12") or selector switch ("08") package. It ends the drying cycle by pulling a slide tab on the back of the start control switch ("10" and "12") or selector switch ("08"). The user sets this switch by pushing the start button ("10" and "12") or dial ("08"). The solenoid resets the switch to the off position by pulling the tab.

### **SILICON CONTROLLED RECTIFIER**

A solid state switching device called a Silicon Controlled Rectifier, or SCR, completes the electrical circuit to the solenoid to end the cycle. It is the triggering of this SCR that is the main function of the electronic control.

### **CHARGING CAPACITOR**

The basic concept involves building an electrical charge in a capacitor. Depending on the resistance in the charging circuit, a certain amount of time is needed to build the charge. The greater the resistance in the circuit, the longer it takes to build the charge.

## **SENSOR CIRCUIT**

A sensor circuit is connected across the capacitor and will, as damp clothes fall against the contact bars, provide a discharge path for the accumulating charge. As long as the clothes are not dry, the charge in the capacitor cannot build to any significant level.

## **TRIGGER CIRCUIT**

Also connected across the capacitor is a neon lamp with two limiting resistors. It is a characteristic of this lamp to be an open circuit when it is not lighted (off) and a fair conductor when on. This switch-over from "off" to "on" occurs when a threshold voltage is reached somewhere between 68 and 82 volts. When the neon lamp conducts (lights), capacitor discharge current flows and creates a voltage drop across the two limiter resistors. The voltage drop across one of these is used to trigger the SCR.

## **PUTTING IT ALL TOGETHER**

The customer starts the cycle by pushing the button on the start control switch on "10 or 12's" or dial on selector switch for "08's". This provides circuit paths to the drive motor, the heat source (electric element, gas valve assembly), and to the electronic control assembly.

As the clothes tumble and dry, contacts are made with the sensor located in the front bulkhead. As long as the clothes still contain moisture, these contacts provide discharge paths for, and prevent the buildup of, a charge in the capacitor.

When the clothes have dried to the point that the discharge path across the sensor is no longer a factor, the charge in the capacitor builds to the threshold level of the neon lamp. The lamp flashes, triggering the SCR into conduction, the shut-off solenoid is energized, and the tab on the start control switching on ("10" and "12") or selector switch ("08") is pulled (the bell rings), and ....the drying cycle is ended.

If the exhaust temperature is above 120 °F., a cool-down thermostat will continue to provide power to the drive motor, and in the case of Permanent Press and Wrinkle Release cycles, also to the electronic control for a repeat chime function.

## **TROUBLESHOOTING**

Troubleshooting the electronic control is made easier if we break the circuit down into blocks.

We have the shut-off solenoid circuit, which includes the start control switch ("10" and "12" and selector switch on "08") and/or cool-down thermostat, the SCR on the electronic control circuit board, the motor centrifugal switch and the door switch.

We have the electronic control assembly. This consists of the plug-in electronic control board the edge-board connector and capacitor assembly.

We have the sensor in the front bulkhead.

The system is easily divided into the parts in the control console and the sensor in the tumbler front bulkhead. A wiring connector is conveniently located in the control console area to allow separation of control components from the sensor. This is a key to service diagnosis of the electronic control system.

When the dryer won't shut off with dry clothes, you need to know whether you have a control problem or a sensor problem. (If the sensor has a leakage path to cabinet ground, the capacitor cannot build a charge. It will continually bleed off.)

Separating the two areas by pulling the wires apart at the coupler will show where the problem is located. If the dryer will shut off in less than 20 minutes without the sensor circuit hooked up, then the sensor must be keeping the dryer from shutting off. If not, then the problem will be in the electronic control, the start control switch ("10" and "12"), selector switch ("08") or shut-off solenoid.

More detailed testing is outlined in the Troubleshooting Section.

### **Adjustable Press Care D810, D712**

The PERMANENT PRESS cycle with the ADJUSTABLE PRESS CARE setting selected will extend the cool-down period at the end of the PERMANENT PRESS CYCLE for the amount of time pre-selected, up to 40 minutes. The ADJUSTABLE PRESS CARE setting operates as follows:

With PRESS CARE set at 40 minutes, the dryer will run until the load is dry and the electronic control fires. The end of cycle "chime" will then ring once.

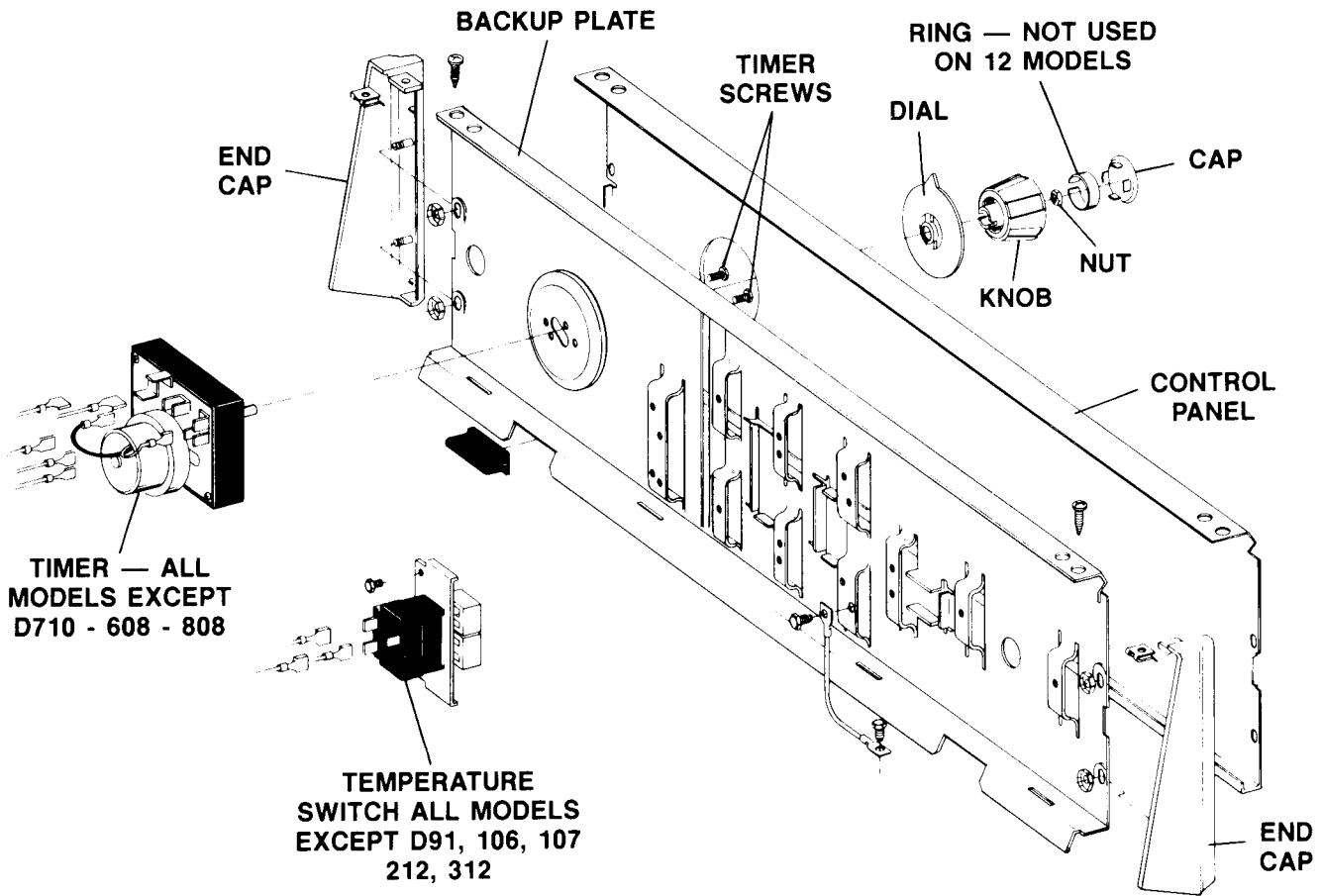
The dial, which has not moved up to this point, begins to advance towards the PERMANENT PRESS marking while the load continues to be tumbled without heat for the 40 minutes. Again, the time is adjustable from 0 to 40 minutes. The "reminder chime" will ring once every 8 minutes until the last 2-3 minutes of the cycle. During the last 2-3 minutes the "chime" will sound every 30 seconds until completion of the cycle.

### **Time Dry — D712**

On the time dry setting, after the first few minutes of operation, the electronic control circuit is bypassed by timer contacts 4 and 3. Power is supplied to the timer motor and the timer will advance.

When the selected time has expired, the electronic control is brought back into the circuit when contact 4 opens and contact 5 closes. A rapid charging process begins. Shortly thereafter the electronic control will energize the shut off solenoid. If the exhaust temperature is above 120 °F., the cool down thermostat will continue to provide power to the drive motor. When the temperature drops below 120 °F., the dryer will stop.





### Timer — All models except D608, D808, D710

A timer is a motor driven package of switches that establishes a sequence of operation.

On the D712 and D810 the timer will not advance in the adjustable press care setting until the shut-off solenoid energizes.

1. Pry out cap.
2. Remove nut and dial.
3. See access to control panel components.
4. Remove timer screws.

### Timer Motor

1. See Access to control panel.
  2. Remove two screws securing motor to timer.
- NOTE: It may be necessary to remove timer.

### Temperature Switch

A switch that allows selection of temperatures.

1. See Access to control panel components.
2. Remove switch from backup plate.

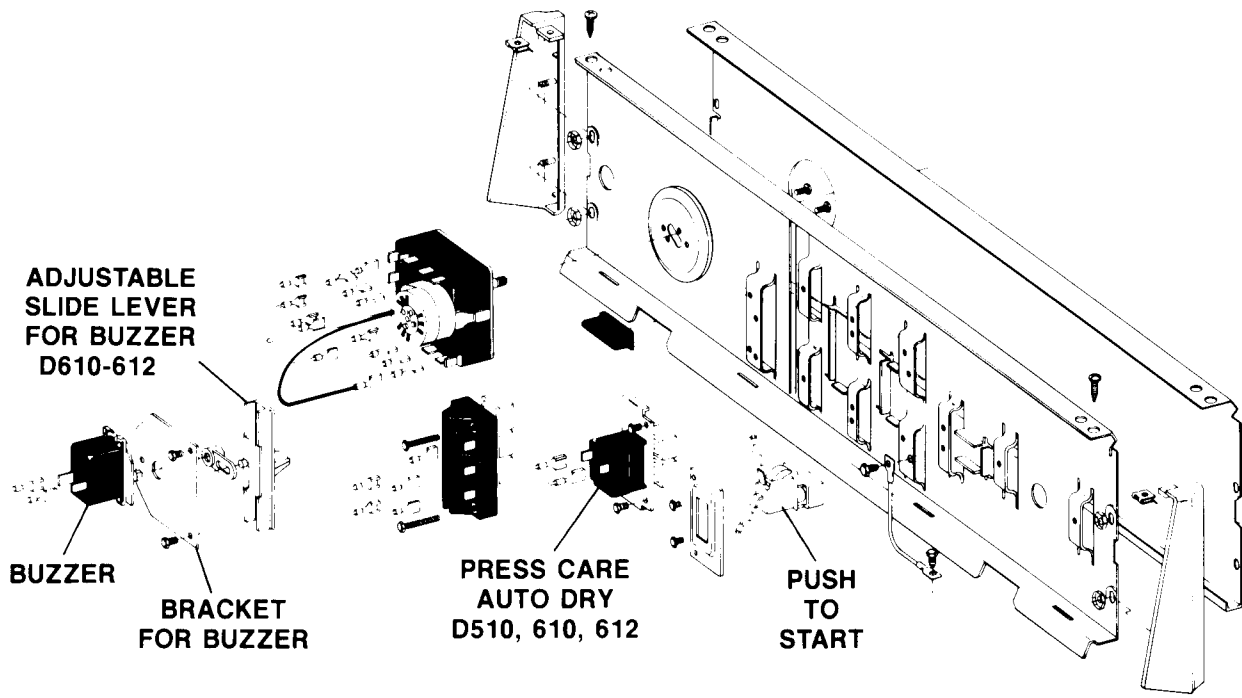
### Control Panel

#### “08” MODELS

1. See Access to control panel components.
2. Remove timer dial.
3. Remove hexhead nuts holding control panel to back-up plate.

#### “10” or “12” MODELS

1. Remove timer dial.
2. See Access to control panel components.
3. Remove end caps.
4. Insert a flat bladed screwdriver between the top portion of the control panel and back-up plate and gently pry the two apart.
5. Disengage notches of control panel from slots in bottom of back-up plate.



**Buzzer — D309, D408, D409, D312, D410, D412, D510, D512, D610, D612**

The auto-dry dryers incorporate a buzzer which signals the end of the cycle on all dry selections. The buzzer is wired in parallel with the timer contacts for the drive motor.

1. See Access to control panel components.
2. Remove buzzer.
3. On D610 and D612 note the shaft of buzzer and corresponding slot in pivot arm of slide lever.

**Buzzer Adjustment — D309, D408, D409**

1. See Access to control panel components.
2. Turn screw clockwise to increase volume and counterclockwise to decrease.

**Adjustable Slide Lever  
D610 and D612**

The level of the end of cycle signal on the Model D610 and D612 can be adjusted by the customer. The signal control lever is raised to increase and lowered to reduce or eliminate the buzzer tone.

1. Remove buzzer.

2. Remove slide lever with pivot arm. Note position of pivot arm, slide lever and retaining plate for future mounting procedures.

**Push-to-Start Switch  
DE91, D110, D210, D212, D312, D410, D412, D510, D610, D612**

1. See Access to control panel components.
2. Remove screws holding switch and bracket.
3. Squeeze expanded end of switch together and remove switch.

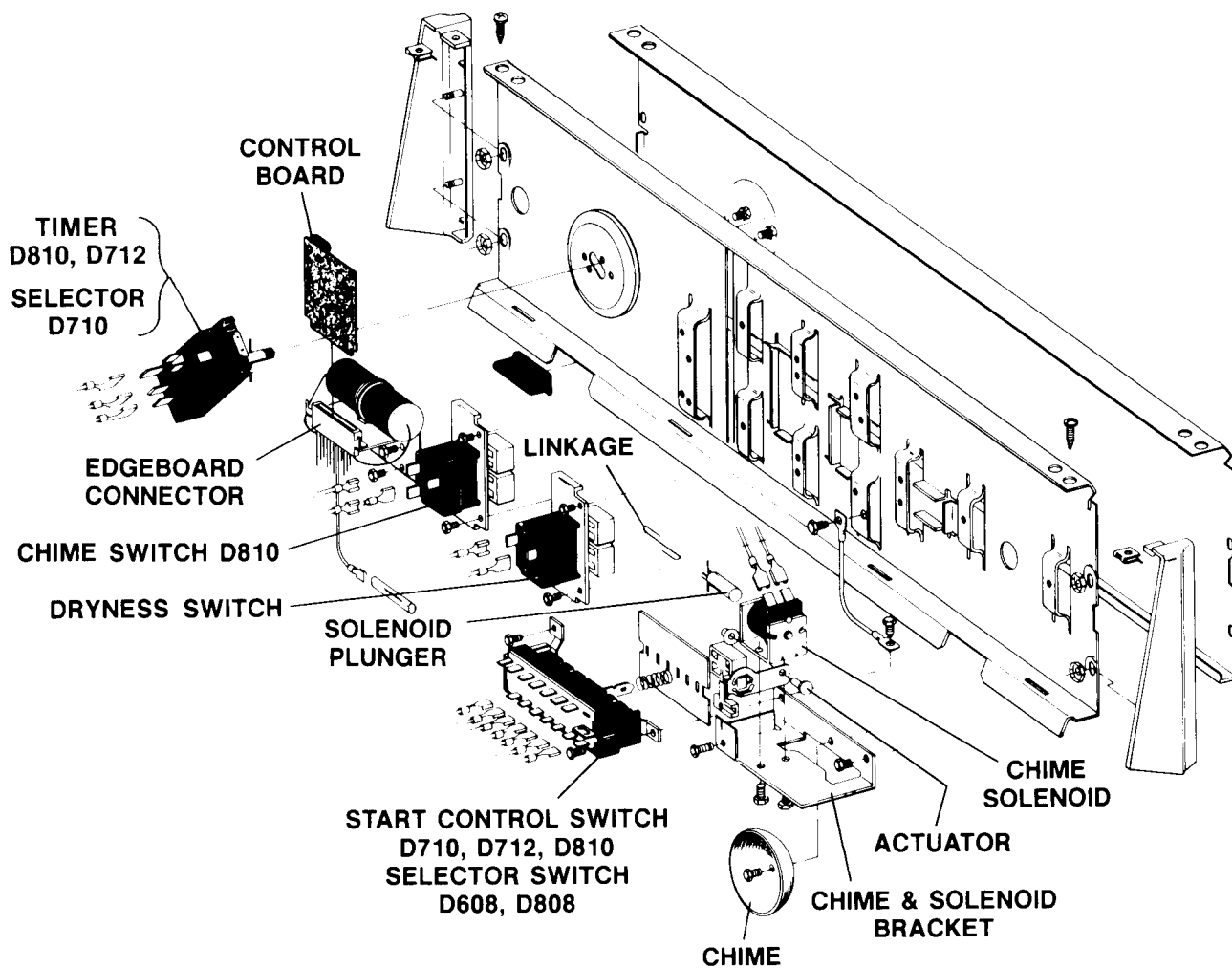
**Auto-dry Switch — D510**

1. See Access to control panel components.
2. Remove switch.

**Press Care Switch — D610 & D612**

With the PRESS CARE "on" button depressed and the timer dial set on AUTO DRY PERMANENT PRESS, the dryer will have the normal 10 minute cool-down at the end of the cycle, then continue to tumble clothes in cool air for an additional 24 minutes. The buzzer will sound every 5 minutes during this period for 3 to 8 seconds.

1. See Access to control panel components.
2. Remove switch.



### Timer — D712, D810

See timer replacement on page

### Selector Switch — D608, D808, D710

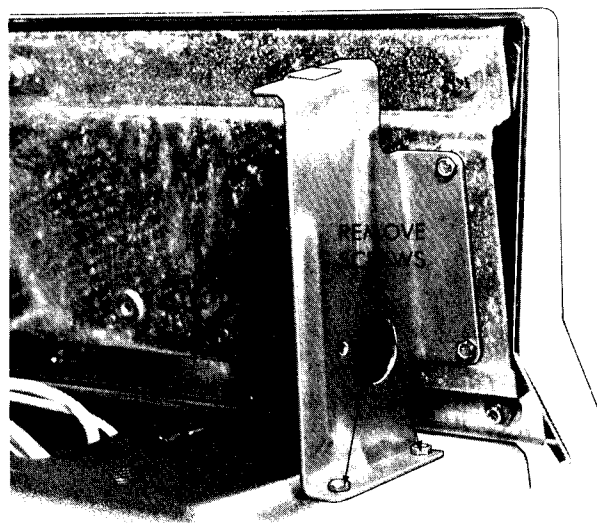
A mechanical switch package in which several switching functions are operated by one actuator.

#### D710

1. Remove dial.
2. See Access to control panel page 3-1.
3. Remove screws holding switch to back-up plate.
4. Remove switch.

#### D608 — D808

1. Remove dial.
2. Gain access to control panel.
3. Remove screws holding control to top cover and lay control panel forward.
4. Remove switch from bracket.
5. Disconnect linkage.



### Start/Control Switch — D710, D712, D810

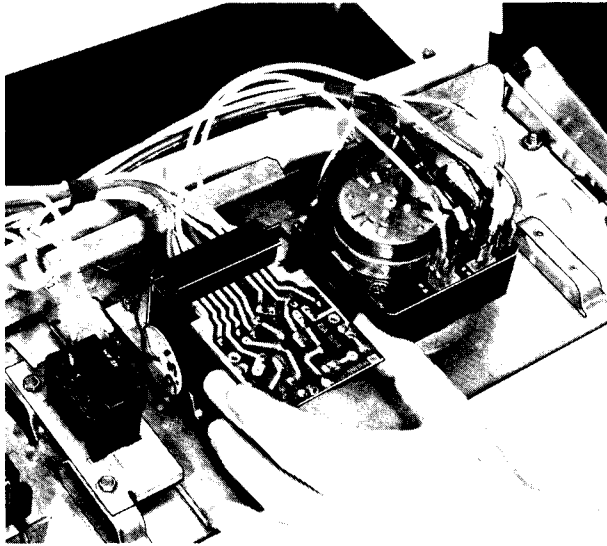
A mechanical switch package in which several switching functions are operated by one actuator.

1. Gain access to control panel.
2. Remove screws holding switch to back-up plate.
3. Disconnect linkage.
4. Remove start control switch.

### Electronic Control Board — D608, D710, D712, D808, D810

A circuit board having the function of controlling the degree of dryness.

1. Gain access to control panel.
2. Grasp the control board as shown and carefully move the board from side to side while gently pulling out.



### Edgeboard Connector & Capacitor

Holds electronic control board D608, D808, D710, D810, D712

1. Remove dryness control board.
2. Disconnect edgeboard connector wires from other electrical components.
3. Remove edgeboard connector assembly.

### Shutoff Solenoid — D608, D710, D712, D808, D810

1. Gain access to control panel.
2. Remove solenoid. When replacing the solenoid, the chime actuator should be positioned on the solenoid plunger and the linkage reconnected before securing the solenoid to bracket.

### Chime Actuator — D608, D710, D712, D808, D810

1. Remove solenoid.
2. Remove chime actuator.

### Chime — D608, D710, D712, D808, D810

1. Gain access to control panel.
2. Move solenoid to one side and remove chime.

### Dryness Switch — D608, D710, D712, D808, D810

NOTE: On D608 and D808 the dryness switch is also the temperature switch.

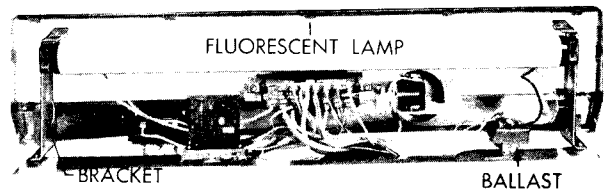
1. Gain access to control panel.
2. Remove switch.

### Reminder Chime Switch — D810

1. Gain access to control panel.
2. Remove switch.

### Fluorescent Lamp, Socket and Ballast D808

1. Gain access to control panel.
2. Fluorescent tube and starter must be turned slightly to disengage from receptacles.

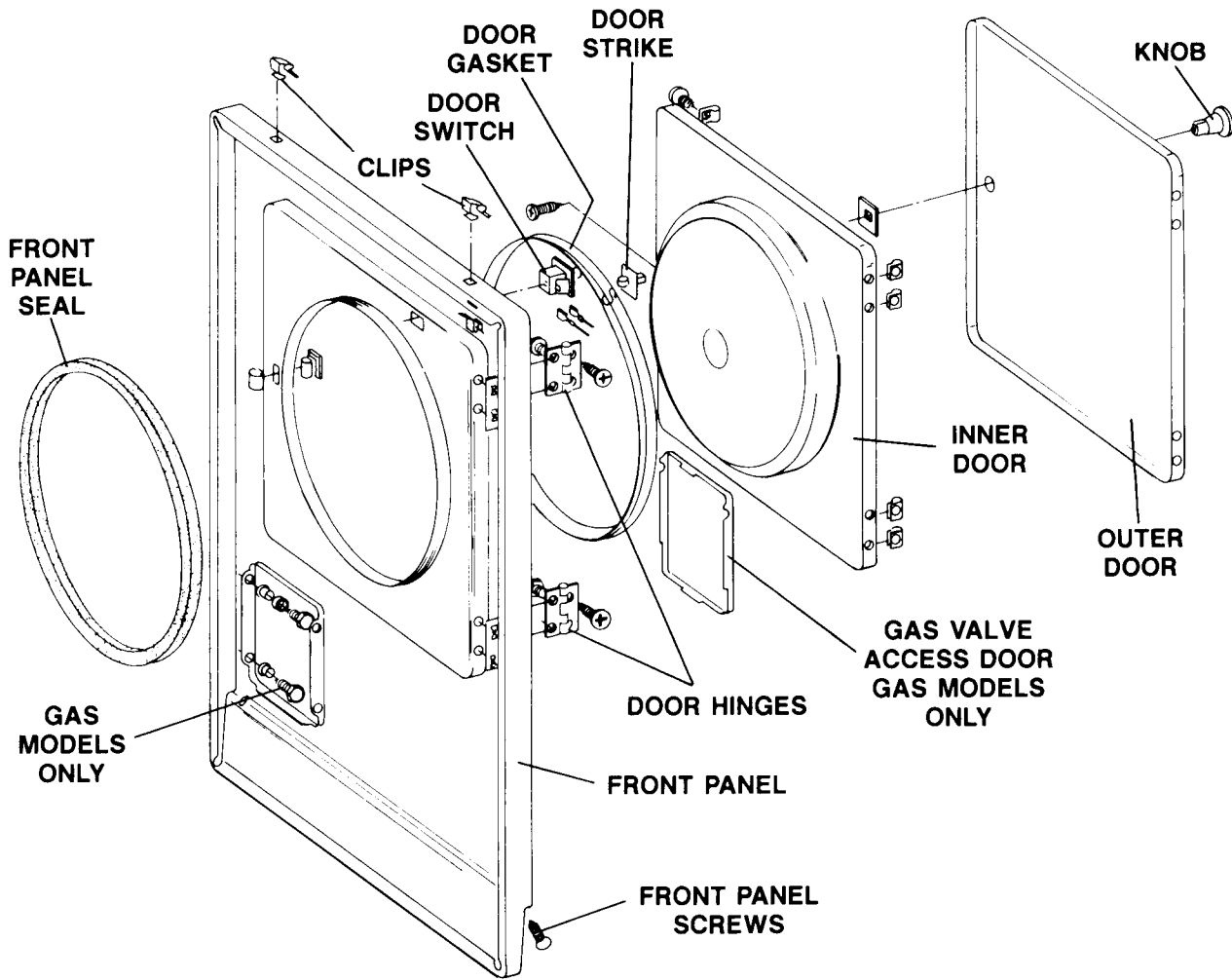


### Chime Switch — D810

Can be used to turn off the repeating chime during the adjustable press care setting. With the off button depressed the chime will sound only once at the end of the drying cycle.

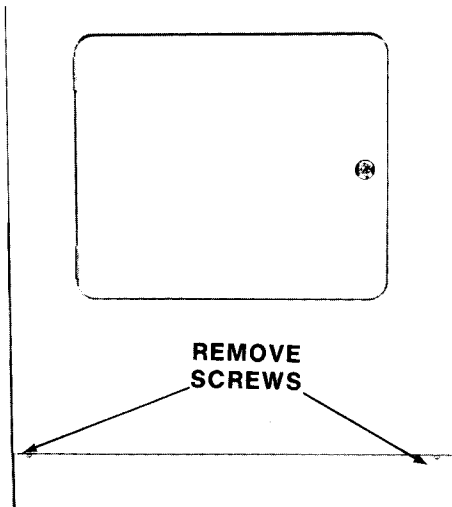
1. See Access to control panel components.
2. Remove switch.

# Front Panel and Components.

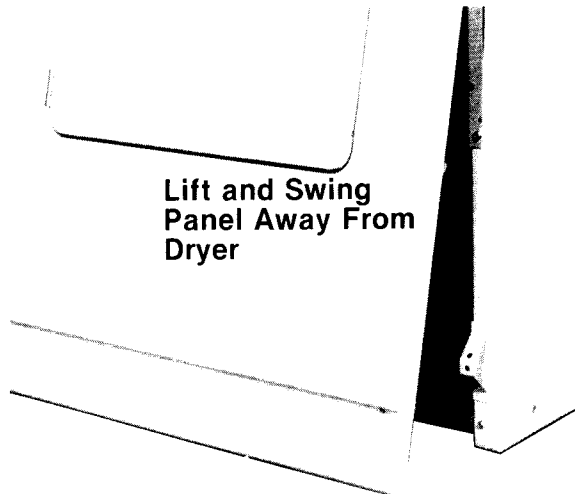


## Front Panel Removal.

1. Remove screws.



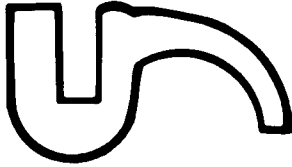
2. Lift up on front panel and swing bottom of panel away from dryer to disengage top of panel from dryer top.



3. Front panel may be set off to one side or if necessary, the door switch wires may be disconnected and the front panel removed completely from the unit.

## DOOR SEAL

1. Open door.
2. Grasp one end and pull gasket from door.
3. When installing the door gasket, the thicker end fits behind the tabs on the door.



4. Install one end of the gasket at the bottom of the door and work the gasket behind each tab.

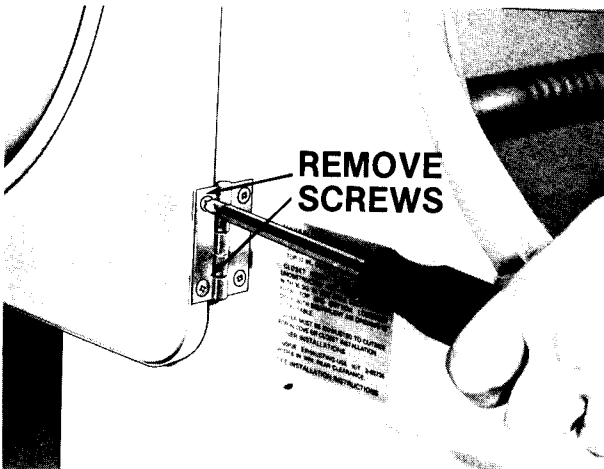
NOTE: It may be necessary to cut 1/2" from one end of the 3-14077 replacement gasket.

## DOOR KNOB

1. Open door.
2. Remove screw from inside the door which holds the knob and pull knob out.

## DOOR REMOVAL

1. Open door.
2. Support door and remove four screws (two from upper hinge and two from lower hinge) which hold the door.



3. Remove door.

## TO DISASSEMBLE DOOR

1. Remove door hinge screws from door.

2. Remove two screws on edge of door opposite hinges.
3. Remove screw holding door knob and separate door halves.

## DOOR STRIKE

1. Separate door halves (see above).
2. Using a pair of pliers, squeeze the expanded end of latch together and remove it from the door.

## DOOR HINGES

1. Remove door from dryer.
2. Remove front panel because each door hinge is backed up by a retaining clip which will fall from place when the hinge is removed.
3. Remove two screws holding each hinge.

## DOOR SWITCH

1. Remove front panel.
2. Squeeze expanded end of switch together and remove switch.

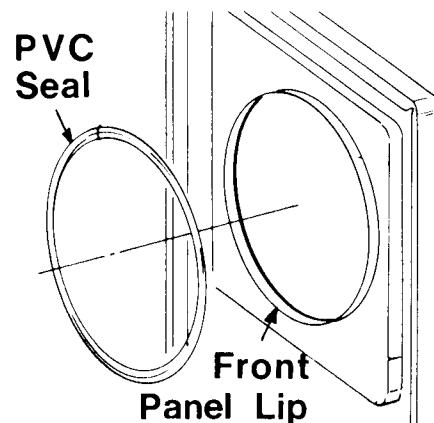
## DOOR CATCH ASSEMBLY

1. Remove front panel.
2. Squeeze the expanded end of the latch together and remove latch.

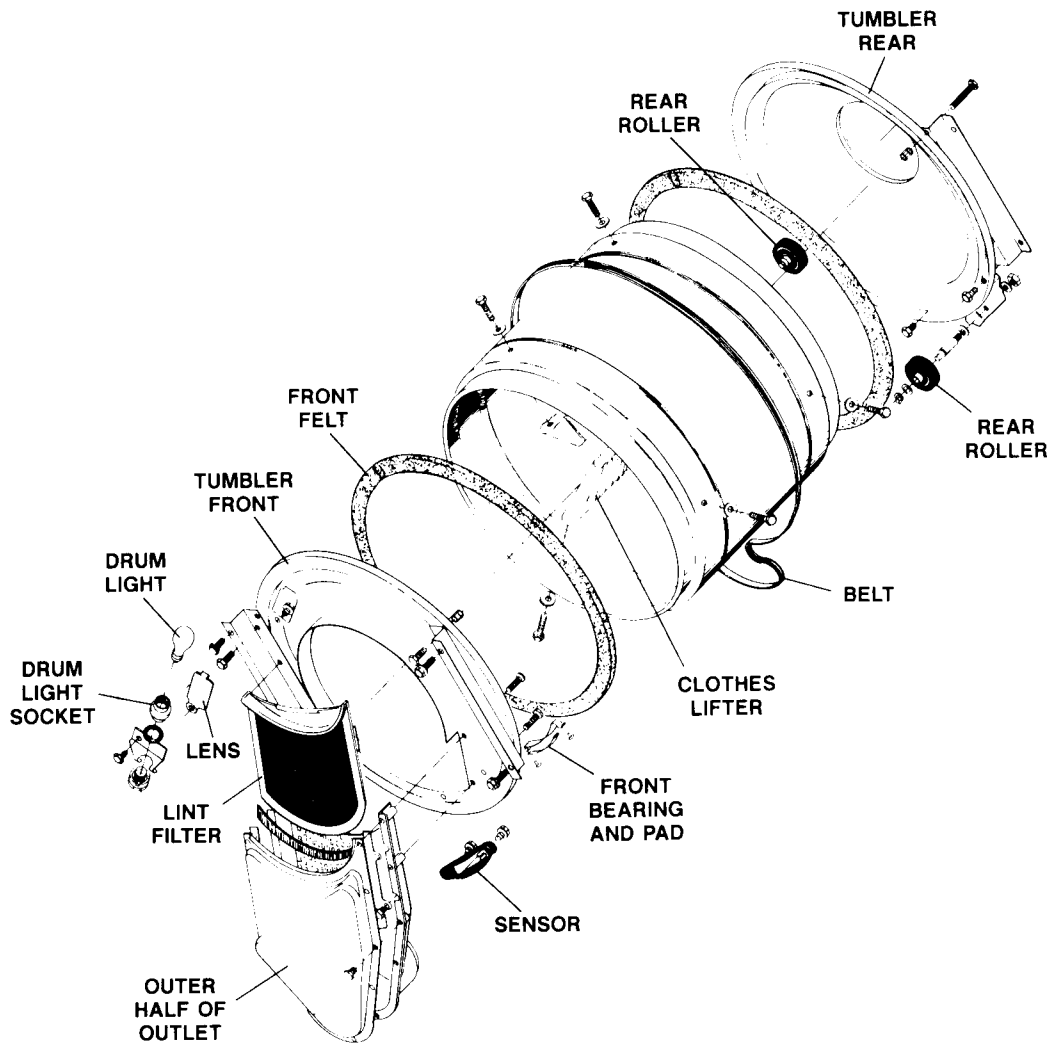
## FRONT PANEL SEAL

To maintain the proper air flow pattern and therefore the desired drying results, the seal which fits around the door opening in the inner front panel must be in place and in good shape. On later 10 models, all 12 models and for all repair purposes the seal is now PVC.

1. Remove front panel.
2. Remove old seal — may be felt or PVC.
3. Install replacement seal by rolling seal over the front panel lip.



# Tumbler and Related Components



## DRUM LIGHT — MODELS D409, D808, D510, D610, D710, D810, D612, & D712

The drum light is at the upper left-hand corner of the tumbler opening. It is wired in series with the door switch so that the light comes on, illuminating the drum, only when the door is opened.

1. Remove front panel and unscrew bulb from socket.

## SENSOR — D608, D808, D710, D810, D712

Two contact plates which detect moisture content.

1. Open dryer door.
2. Remove two screws holding sensor, pull sensor out and remove wires.
3. Remove sensor.

4. If a wire has come off of a sensor terminal it will probably be necessary to remove the front panel to reinstall it.

## OUTER HALF OF OUTLET DUCT

The outer half of the outlet duct is held to the front of the tumbler front.

1. Remove front panel.
2. Remove nine screws holding outer half of outlet duct to tumbler front.
3. Remove outlet duct (outer half).

## GUIDES FOR LINT FILTER

1. Remove outer half of outlet duct.
2. Remove screw holding guide to inner half of outlet duct.

## INNER HALF OF OUTLET DUCT

1. Remove outer half of outlet duct.
2. Remove 4 screws securing inner half of outlet duct to tumbler front.

## TUMBLER FRONT

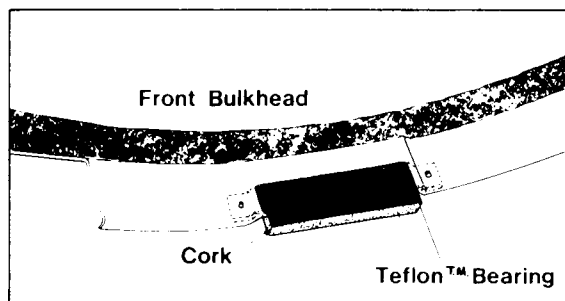
The tumbler front holds the front of the tumbler in the correct position and provides the bearing surfaces for the tumbler to ride on.

1. Remove front panel.
2. Remove four screws holding tumbler front to cabinet.
3. Remove screw holding ground wire to cabinet.
4. Pull tumbler front out and away from tumbler.

NOTE: Two tabs on each side of the tumbler front fit into notches in the front of the cabinet. These must be disengaged to remove tumbler front.

## TUMBLER FRONT BEARING AND PADS

At the bottom inside of the tumbler front are two bearings which rest on cork pads. They may be either carbon Teflon or polyteflon. Repair bearings will be polyteflon. These bearings are to provide a surface for the front of the tumbler to ride on. If it is necessary to replace a front bearing, remove the tumbler front, drill out old rivets and rivet new bearings on. In positioning the bearing and pad, the projections on both should face the tumbler. This allows the bearing to stick out beyond the metal of the tumbler front.

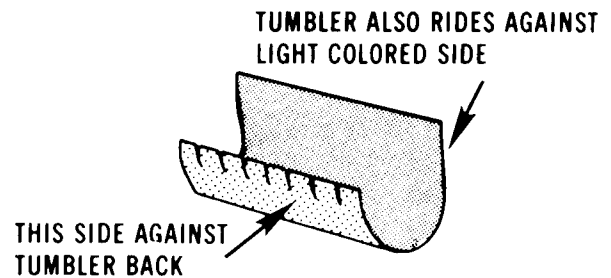


## TUMBLER FRONT SEAL

The seal fits around the back circumference of the tumbler front. It is a natural felt seal which is doubled over for self-adjusting tension. The surface which comes in contact with the revolving tumbler, is coated with a layer of Teflon to provide a slick durable wear surface.

1. Remove tumbler front.
2. Remove the old seal and as much adhesive as possible. A heat gun or hair dryer will help. Thoroughly clean surface where new seal will be installed.

The Teflon coated side (which is the lighter of the two colors) goes against the tumbler. The seal is then looped in a "U" shape so the slot edge of the lighter colored side is cemented to the tumbler front. Part No. 55978 rubber adhesive is used to hold the seal.



## TUMBLER AND BELT

The tumbler is a round cylinder with no permanently attached front or back.

Two different tumblers have been used on Maytag dryers. The tumbler used on early Model "08" dryers did not have reinforcing ribs around the circumference of the tumbler.

The ribbed tumbler uses different clothes lifters and a different motor pulley. The motor pulley is revised to reduce the drum speed from 52 rpm to 47. As such, the tumbler, lifters and motor pulleys are not individually interchangeable. Consult your parts catalog.

Removal and replacement procedures are the same for both style tumblers.

See Next Page



### To Remove Tumbler And Drive Belt:

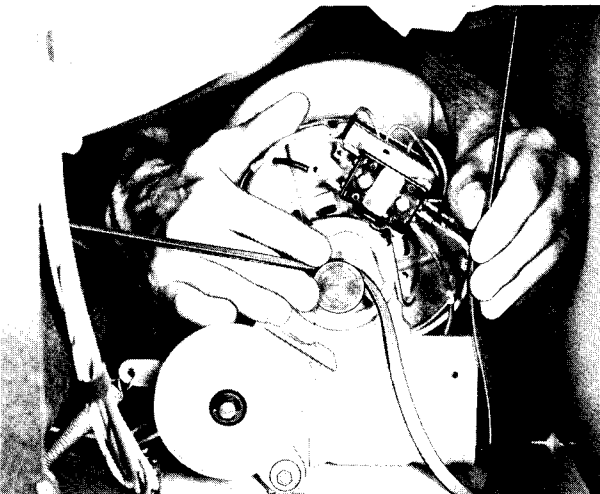
1. Remove front panel.
2. Remove tumbler front.
3. Reach under tumbler and remove drive belt from motor and idler pulleys.



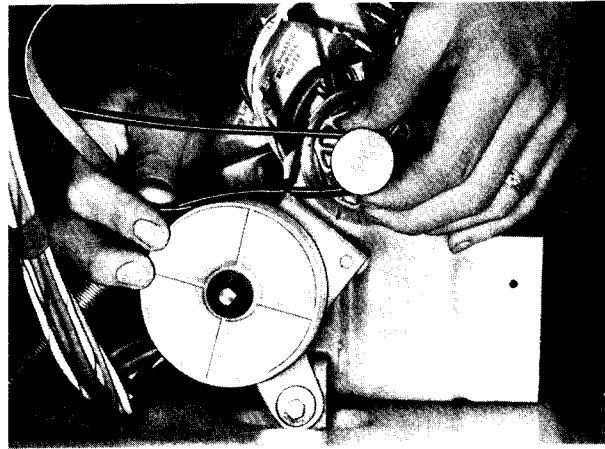
4. Slip belt off tumbler.
5. Pull tumbler out of cabinet.

### INSTALLING DRIVE BELT

1. Install tumbler.
2. Place belt over the top of the dryer tumbler with the smooth side against the tumbler and position it about 1-1/2" in front of the back screws which hold the clothes lifters. In order to get the belt between the bottom of the tumbler and the blower, it will be necessary to lift up on the tumbler.
3. The best position to take while installing the belt is to sit on the floor facing and as close to the dryer as possible. Place your left arm along the left side of the tumbler and your right arm along the bottom of the tumbler (as close to the blower as possible).



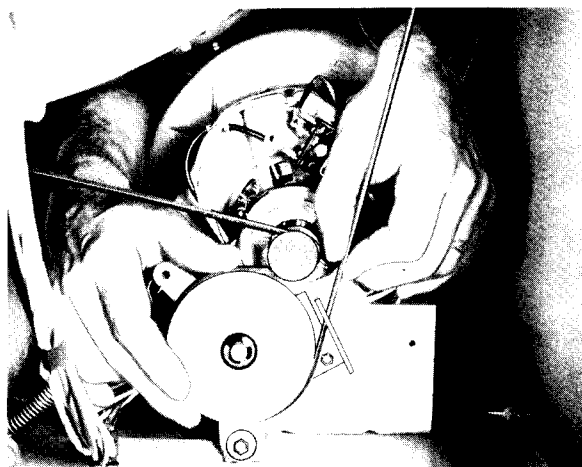
4. With the right hand, loop the belt over the top of the motor pulley making certain the grooves of the belt are against the pulley and that the belt is properly seated into the pulley.
5. With the left hand, loop the belt under the motor pulley.



6. With the right hand, position the belt over the top of the idler pulley and begin to work it around the circumference of the idler pulley while pushing the pulley up and to the left.

NOTE: It is neither necessary nor advantageous to push extremely hard on the pulley. This tends to put the idler pulley and motor pulley in a bind and also puts a strain on the installer so he cannot work efficiently with his hands to complete the belt installation.

7. Once the belt is almost around the entire circumference of the idler pulley, use the left hand to push the belt over the bottom of the idler pulley while at the same time making certain that the belt is between the idler pulley and the belt guide.
8. With the belt completely installed, feel with both hands to see that it is properly positioned in the motor pulley and in the approximate middle of



the idler pulley. When you have determined by feeling that it is installed correctly, lift up and push back while slowly turning the tumbler one or two revolutions in a clockwise direction to allow the belt to properly align itself.

## CLOTHES LIFTER

There are three tumbler clothes lifters used to aid in tumbling the clothes.

On later Model 08 and on 10 & 12 dryers, the height of two of the three clothes lifters has been increased by one inch. These are not interchangeable with the previously used clothes lifters.

1. Remove front panel.
2. Remove two screws holding each lifter to the tumbler.

For ease in replacing a clothes lifter you will find a locating tab on the underside of the lifter. Pilot slots are also found in the tumbler. When the clothes lifter is installed, the tab is inserted into the slot in the tumbler. This correctly aligns the screw holes in the lifter with those in the tumbler.

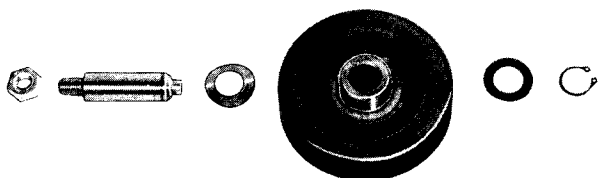
## ROLLER AND BEARING ASSEMBLY

The tumbler roller consists of a rubber tire bonded to a steel or plastic hub.

There are two roller and bearing assemblies attached to the tumbler rear. Normally the rollers will run slightly behind the drum radius. If the rollers are riding up on the tumbler radius, check for bent rear roller brackets. If a bracket is bent, replace tumbler rear.

1. Remove front panel.
2. Remove tumbler front.
3. Remove tumbler.
4. Remove retaining ring from groove in shaft.
5. Remove fiber washer.
6. Remove roller.
7. To remove roller shaft remove nut on back.

NOTE: There is a spacer washer behind the roller. When replacing parts be certain the order of the replacement is correct.

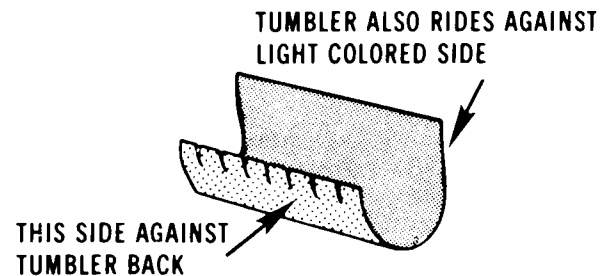


If the bearing is bronze in color, lubricate with 55977 turbine oil. Should the bearing be grayish silver color, lubricate with 55975 S.B.L.

## TUMBLER REAR FELT SEAL

The seal fits around the front circumference of the tumbler rear. It is a natural felt seal which is doubled over for self-adjusting tension. The surface which comes in contact with revolving tumbler is coated with a layer of Teflon to provide a slick durable wear surface.

1. The felt seal for the rear tumbler can be replaced from the front of the dryer. However, for ease in servicing, we recommend removal of the tumbler rear from the dryer.
2. Remove the old seal and as much adhesive as possible. A heat gun or hairdryer will help. Thoroughly clean surface where new seal will be installed.
3. The Teflon coated side (which is the lighter of the two colors) goes against the tumbler. The seal is then looped in a "U" shape so the slot edge of the lighter colored side is cemented to the tumbler back. Part No. 55978 rubber adhesive is used to hold the seal.



## TUMBLER REAR

The tumbler rear is secured to the back panel by four screws. It is finished with an epoxy powder coat which is a very smooth surface, resistant to scratches and abrasion.

The tumbler rear acts as a support for two roller assemblies which support the tumbler and weight of the load.

Removal:

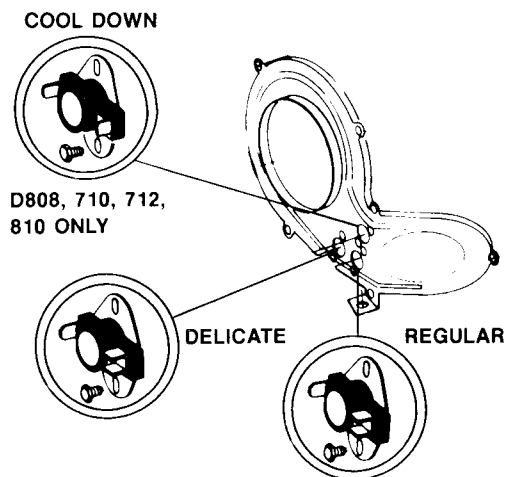
1. Remove front panel.
2. Remove tumbler front.
3. Remove tumbler and belt.
4. Remove heat cone.
5. From back of dryer, remove four screws holding tumbler back assembly and remove assembly.

# Blower, Regulating and Cool Down Thermostats

## THERMOSTATS

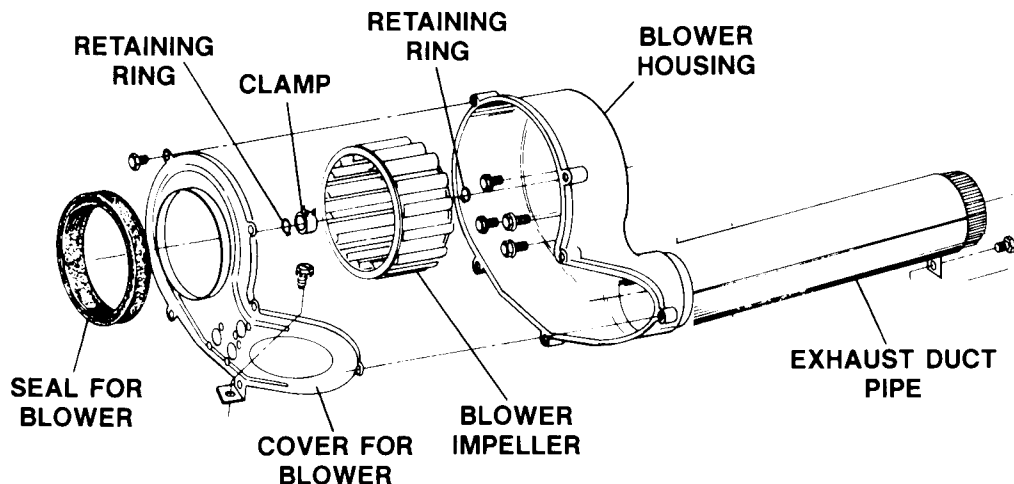
A bimetal actuated switch which reacts to temperature changes.

The cool down thermostat is only used on electronic control dryers. It is possible that you may encounter one or two regulating thermostats. Any dryer with one regulating thermostat, the thermostat will be a delicate temperature thermostat.



1. Remove front panel.
2. Remove wires from thermostat.
3. Remove screws holding thermostat to housing.
4. Remove thermostat.

## BLOWER



### SEAL FOR BLOWER

The felt seal for the blower is secured to the lip of the cover for the blower. If a seal is replaced, clean surface and use Maytag Part No. 55978 rubber adhesive to hold seal.

### COVER FOR BLOWER

1. Remove front panel.
2. Remove tumbler front.
3. Remove six screws holding cover to blower housing.

4. Remove screw holding cover to base.
5. It is not necessary to remove wires from thermostats to gain access to blower. Simply lay blower cover forward.

### **BLOWER IMPELLER**

The blower impeller is attached directly to the motor shaft and behind the blower cover.

1. Remove blower cover.
2. Remove clip retaining ring.
3. Compress and remove clamp around hub of impeller.
4. Work impeller back and forth while pulling off shaft.

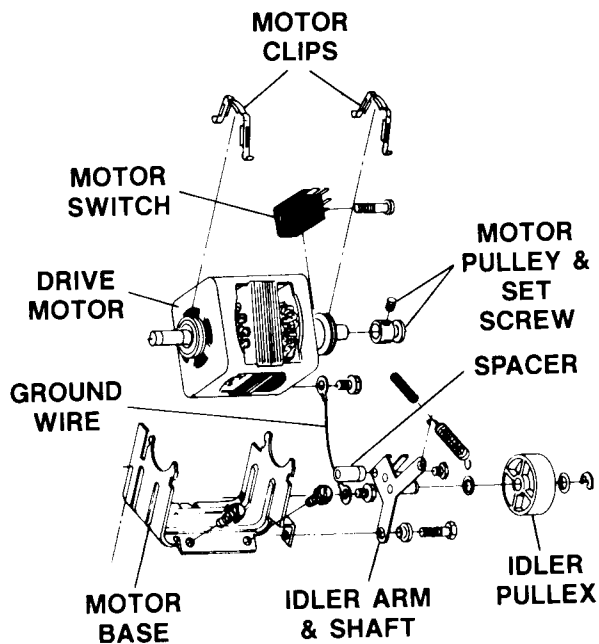
### **BLOWER HOUSING**

1. Remove blower impeller.
2. Remove clip retaining ring located behind blower impeller.
3. Remove four screws holding blower housing to motor mounting bracket.
4. Remove blower housing.
5. When replacing blower housing be certain the clip retaining ring is properly replaced into the groove in the motor shaft.

### **EXHAUST DUCT PIPE**

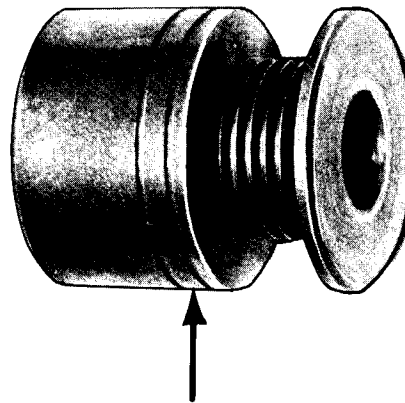
One end of the exhaust duct pipe is held to the back of the cabinet by one screw. It fits over the blower housing on the opposite end.

# Drive Motor and Idler Assembly



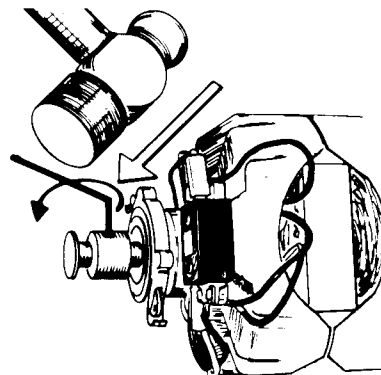
- 
- 0 grooves-60Hz, 52 rpm pulley-original tumbler
  - 1 groove -50Hz, 52 rpm pulley-original tumbler
  - 2 grooves-60Hz, 47 rpm pulley-ribbed tumbler
  - 3 grooves-50Hz, 47 rpm pulley-ribbed tumbler
- 

Shown is the 2-groove, 60 Hz, 47 rpm pulley.



## NOTE GROOVES

1. Remove front panel.
2. Remove tumbler front.
3. Remove tumbler.
4. Place hexhead wrench in set screw.
5. Using a hammer or rubber mallet, strike the end of the hexhead wrench, as shown.



## MOTOR SWITCH

A switching device in a motor used to change the path of electricity from both start and run windings to run winding only. It also completes the circuit to the heat source when motor reaches speed.

The external motor switch is secured to the motor with two screws.

1. Remove front panel.
2. Remove tumbler front.
3. Remove tumbler.
4. Remove two screws holding switch to drive motor.

## MOTOR PULLEY

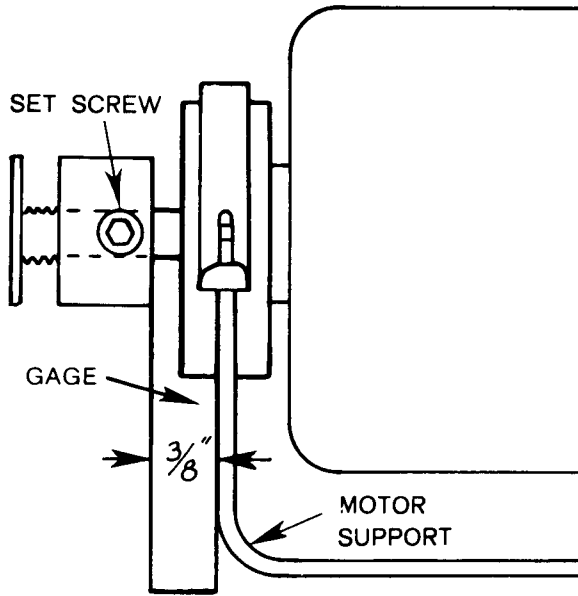
Because of the various motor pulleys available, they are identified using grooves in the hub of the pulley. When obtaining a replacement motor pulley, be sure the correct pulley is used. The following motor pulleys are not interchangeable with each other. Failure to use the correct motor pulley will result in improper drying since the clothes will not tumble correctly.

## MOTOR PULLEY ADJUSTMENT

Positioning of the pulley on the motor shaft is important for proper alignment with the idler assembly. The distance from the back of the motor pulley to the face of the motor support must be  $\frac{3}{8}$ ". A metal gage (Maytag Part No. 38623) is available which can be used to properly position the pulley.

To use the gage, simply place the thicker part against the motor support and the thinner end

between the pulley and the mounting ring. With the proper  $3/8$ " dimension established, tighten the pulley set screw.



When replacing the motor pulley make sure the set screw aligns with the flat side of the motor shaft. Tighten set screw securely.

## DRIVE MOTOR AND BASE

1. Remove front panel.
2. Remove tumbler front.
3. Remove tumbler.
4. Remove two screws securing motor base to base frame.
5. Remove wires from motor and unhook idler spring.
6. Slide motor base tab from base frame.
7. Remove motor and blower assembly from cabinet.
8. Remove blower component from motor.

NOTE: When installing motor, be sure to slide motor base tab into slot in base frame.

9. Using a pliers or screwdriver, roll the clips off of the motor mounts.
10. Remove motor from motor base.

## IDLER ASSEMBLY

1. Remove front panel.
2. Remove tumbler front.
3. Remove tumbler.
4. Remove spring and screw holding assembly.

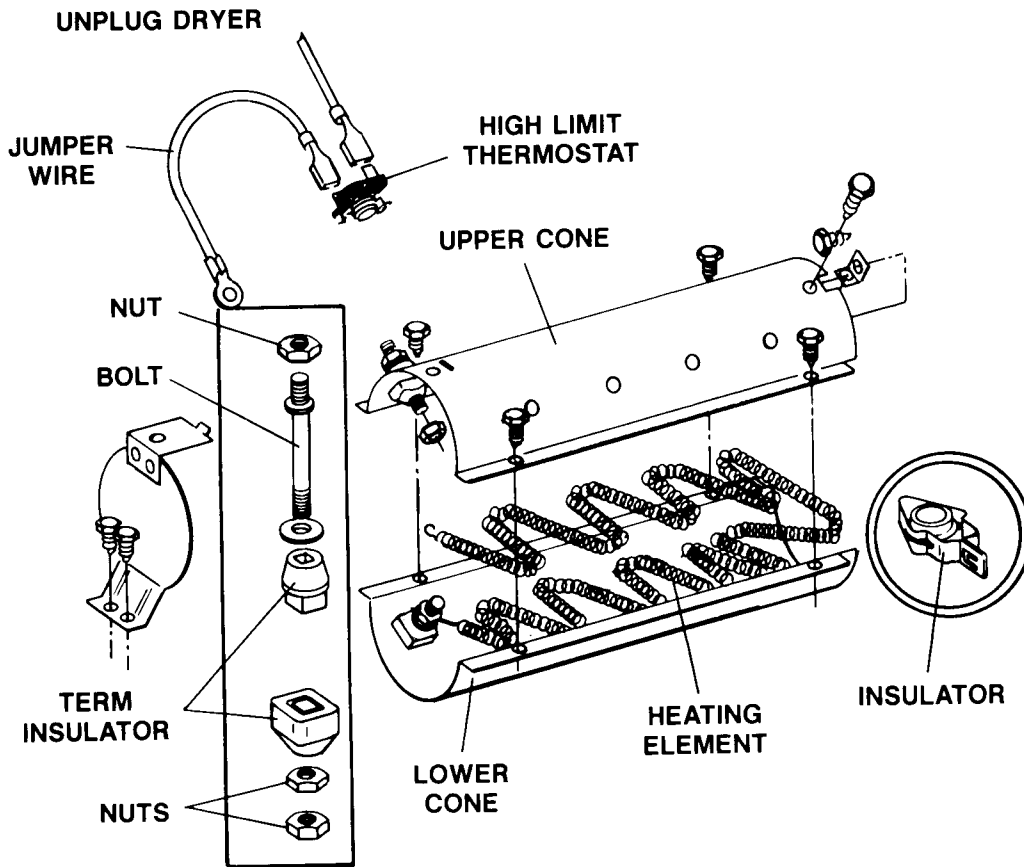
NOTE: When replacing the idler assembly apply a light coating of 56016 Maytag center seal grease to the motor support where it is contacted by the spacer for the idler.



## IDLER PULLEY

1. Pry clip from groove in shaft with a small screwdriver.
2. A fiber washer is located on both sides of the pulley. Be certain these are replaced when you reassemble these parts.

# HEATING ELEMENT AND RELATED COMPONENTS-ELECTRIC MODELS



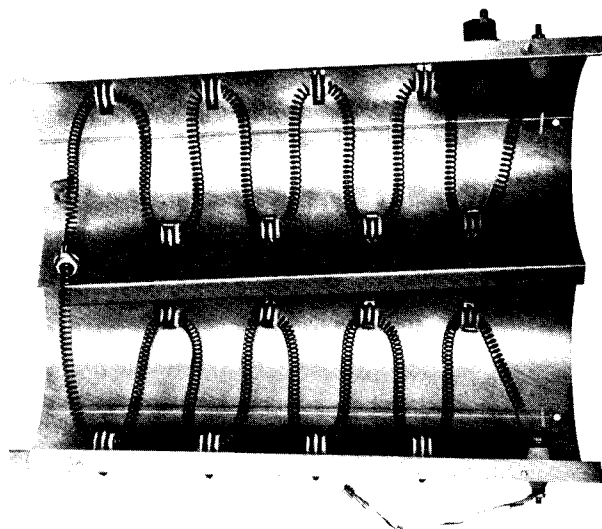
## HEAT CONE

1. Remove front panel.
2. Remove screws holding heater cone shield to base. Remove shield from dryer.
3. Remove screw in front of cone holding cone to base and remove screw in back of cone holding cone tab to inlet air duct.
4. Remove wires to terminal posts.
5. Pull cone out of dryer.

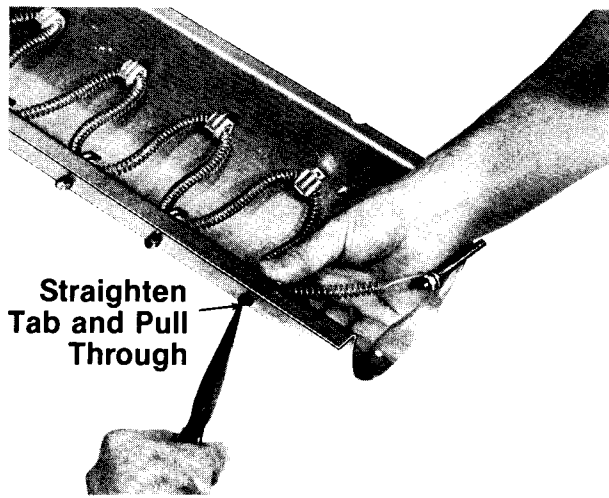
## HEATING ELEMENT

The heating element utilizes Nichrome 5 wire which is coiled and strung through insulators in the heat cone. The standard dryer is equipped with a heating element designed to draw approximately 5300 watts when operated on 240 volts.

1. Remove heat cone.
2. Remove four screws holding cone halves together and lay halves side-by-side.



3. Remove nuts from insulators holding ends of element.
4. Using pliers, squeeze and straighten insulator clips and push clips out of heat cone halves. Thread insulators off of original element.



**Straighten  
Tab and Pull  
Through**

5. Inspect insulators, replace any that are damaged.
6. Drop insulators over new element (there are 17).
7. Place looped ends of new element over terminal studs and replace nuts. (Don't overtighten, you may crack insulator)
8. Reinsert insulator clips and secure by twisting tabs with pliers. Maintain slight tension on the element as clips are reinstalled. (See photo)
9. Be very careful when installing new element so the element is not stretched. If you come up short or long on element at the end, go back and readjust the element from the beginning. Do not stretch the last part of the element to fit. Check

for cracked insulators. Any that are damaged should be replaced.

10. Be sure element does not touch insulators. Also, make sure the electrical connections are tight.

## HI-LIMIT THERMOSTAT

The hi-limit thermostat in an electric dryer is located on the heat cone. It is many times referred to as the safety thermostat. This thermostat is located close to the heating element and in the event of an over-heating condition, will cycle the heat off quickly. If a dryer is found to be cycling on the hi-limit, check for an air flow restriction.

To Replace:

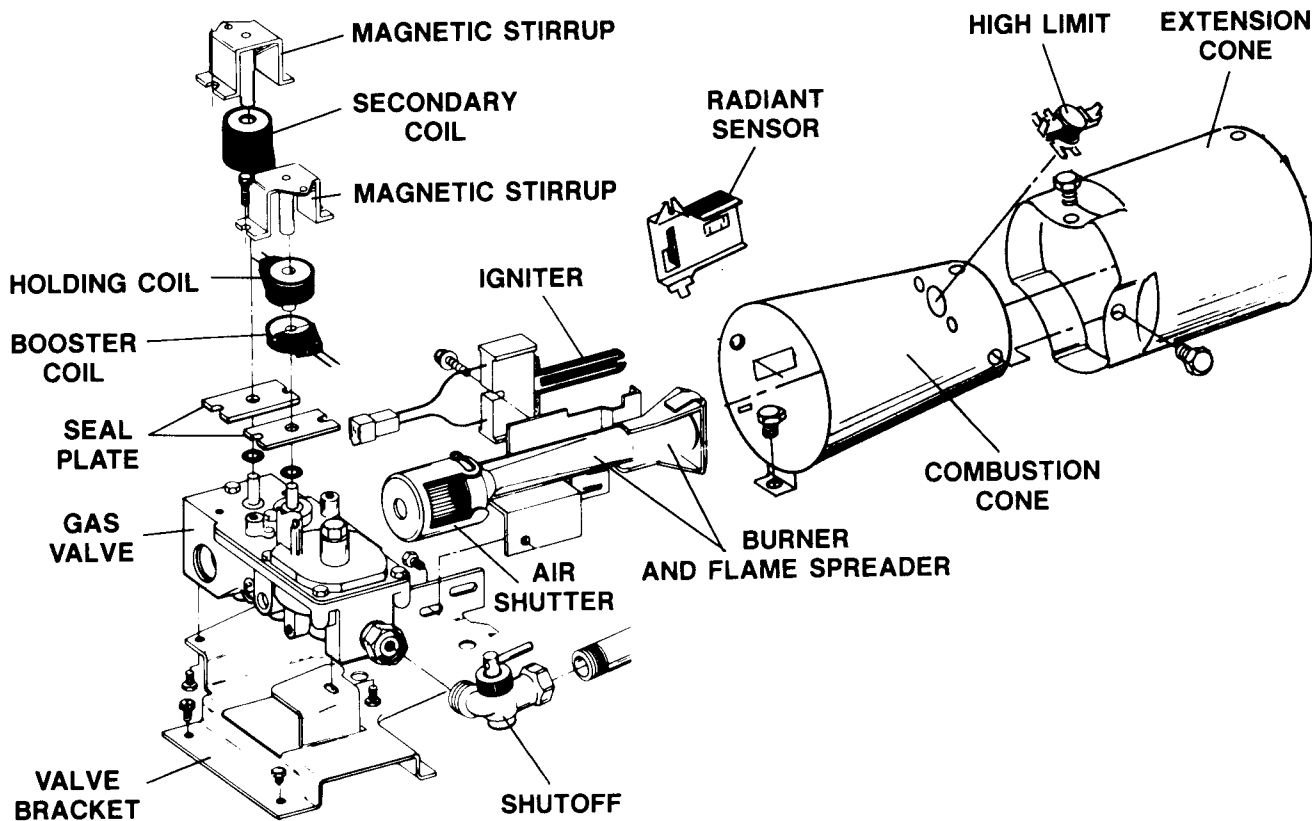
1. Remove front panel.
2. Loosen back screw.
3. Remove front screw.
4. Remove wires and slide thermostat out.

## INLET DUCT

To replace the inlet duct, it will be necessary to remove tumbler rear. The inlet duct is secured to the tumbler rear by three screws, one at top and two at the bottom under the felt seal.



# Gas Valve and Related Components



The gas controls utilize a direct ignition system (there is no pilot light). The three major components of the gas are: Igniter, Radiant Sensor and Gas Valve.

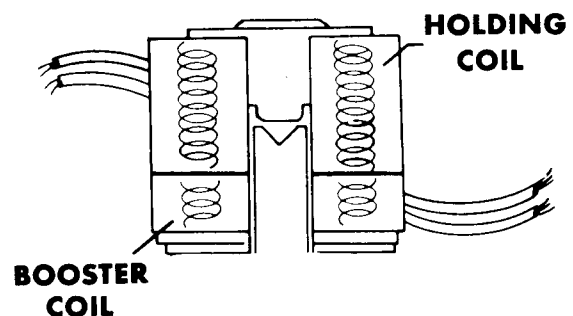
1. **Igniter** — When the controls call for heat, line voltage is applied to the igniter. This causes the igniter to heat up becoming cherry red. It can reach a temperature of approximately 2200 degrees F. in about 30 seconds. Gas contacting igniter at this temperature will ignite immediately.
2. **Radiant Sensor** — The radiant sensor operates much like a regular thermostat. It is mounted to the side of the combustion cone over an opening which exposes the sensor to the igniter and burner flame.

In its normal condition, the contacts in the radiant sensor are closed and the circuit is completed to the igniter. As the igniter heats up, the heat radiated by the igniter causes the radiant sensor contacts to open breaking the circuit to the igniter.

3. **Gas Valve** — The gas valve is actually two gas valves, one in series with the other. This is a

safety feature providing added protection against gas release in the event of a failure of one of the valves to seat properly.

The first valve is opened by a solenoid which has two separate coils built into one solenoid. This solenoid uses what is termed a split coil. The coils are referred to as the holding coil and the booster coil.



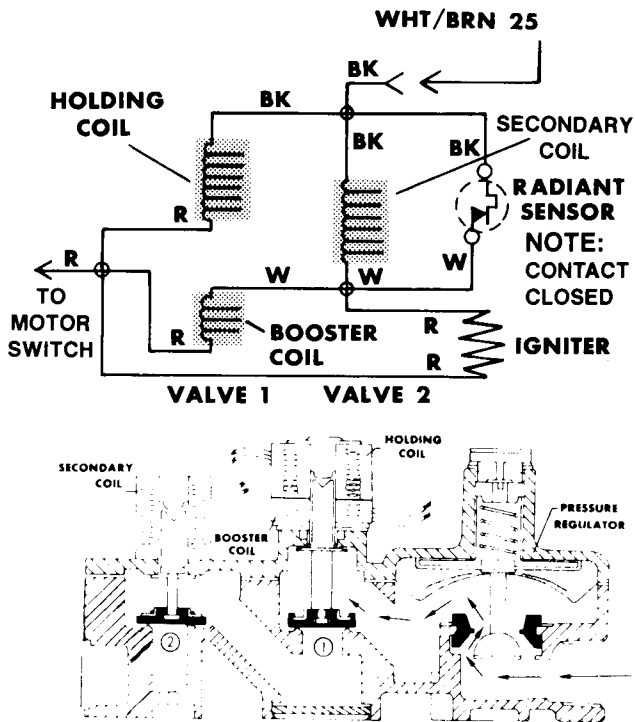
Both coils are needed to lift the armature and open the valve. The holding coil is strong enough to keep the valve open once the armature has been lifted.

The second of the two valves is operated by the traditional one coil solenoid. This is called a secondary coil.

The sensor, igniter and gas valve are all interrelated and function as an ignition and heat source.

**The complete system functions as follows:**

At the start of the cycle, the sensor contacts are closed, the igniter is at room temperature and the gas valve is closed blocking the flow of gas.



First, note on the wiring diagram that the radiant sensor contacts are wired across the secondary coil. This effectively bypasses current around the secondary coil when the radiant sensor contacts are closed. Valve 2 cannot open with the radiant sensor contacts closed.

The booster coil and the igniter are also wired in parallel. Note that while these two components are in parallel with each other, they are wired in series with the radiant sensor and secondary coil combination. When the radiant sensor contacts are closed, full line voltage is available to the booster coil and to the igniter. When the radiant sensor contacts open current has to flow through the secondary coil on Valve 2 in order to get to the booster coil and to the igniter. A significant voltage drop develops across the secondary coil. While the parallel booster coil and igniter are still in the circuit, they become ineffective due to the greatly reduced voltage available to them.

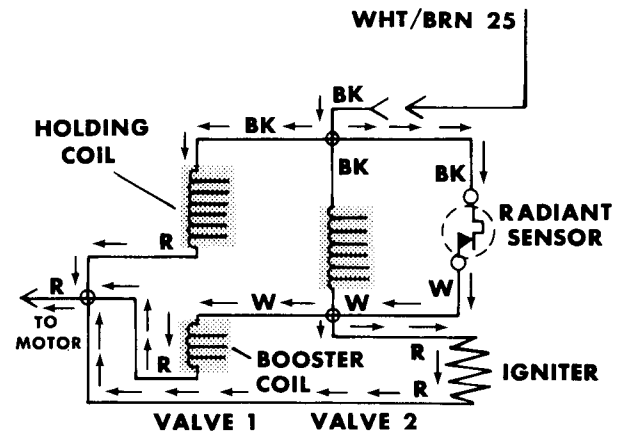
**Operation: Dryer controls calling for heat.**

**PHASE I**

Power reaches the valve assembly by means of the Molex wiring connector. The black valve harness wire is normally the "hot" side of the line and the red is normally the neutral side of the line and is completed through the motor centrifugal switch.

**Radiant sensor contacts closed.**

The holding coil, booster coil, and igniter all receive line voltage. The holding coil and booster coil develop the necessary magnetic pull to open Valve 1. The igniter, operating at line voltage, begins to get very hot. The heat radiated by the igniter affects the element of the radiant sensor.



Because the secondary coil on Valve 2 is bypassed by the radiant sensor contacts, Valve 2 remains closed and prevents the release of gas.

**PHASE II**

The igniter is now hot and Valve No. 1 is open. With the igniter hot, two things occur:

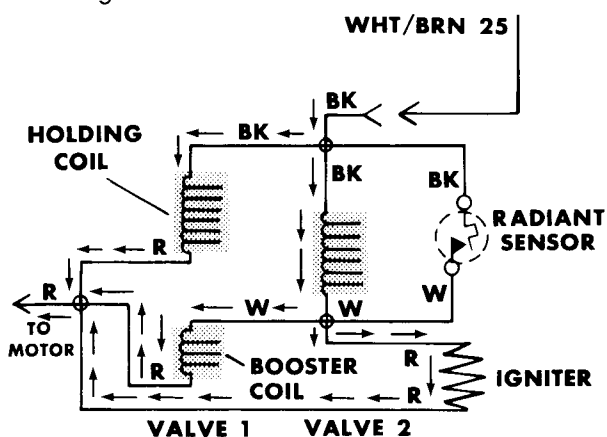
1. As the igniter is heated, its resistance decreases.
2. The heat from the igniter causes the radiant sensor switch to open.

**PHASE III**

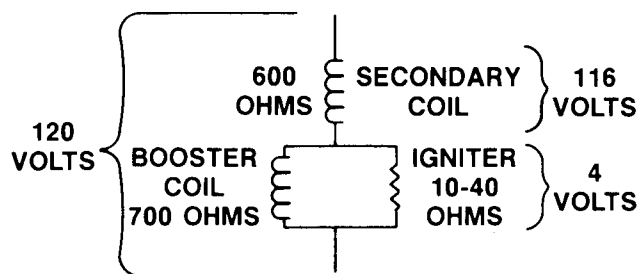
Valve 1 is being held open by the holding coil and with the radiant sensor contacts open because of the intense heat from the igniter, the current paths in the circuit change.

1. With the sensor contacts open, the secondary coil is no longer bypassed. It is now in series with

the parallel combination of the booster coil and the igniter.



Because of the very low resistance of the hot igniter, most of the line voltage is dropped across the secondary coil. Only a small percentage is dropped across the booster coil and igniter.



2. The secondary coil now opens Valve 2 releasing gas across the still extremely hot igniter. The burner flame is ignited.

While the igniter will cool, the tip is positioned in the burner flame which keeps it hot and the resistance low.

The ignition cycle is now completed and the drying cycle begins.

The gas valve as shipped with the dryer or for repair is set for use with natural gas. Because of differences in operating pressure and heat content of other gases, the valve must be converted to use fuels other than natural gas.

Conversion kits are available to convert from natural to L.P.G. and back from L.P.G to natural. Check parts catalog for correct part number.

## GAS CHART

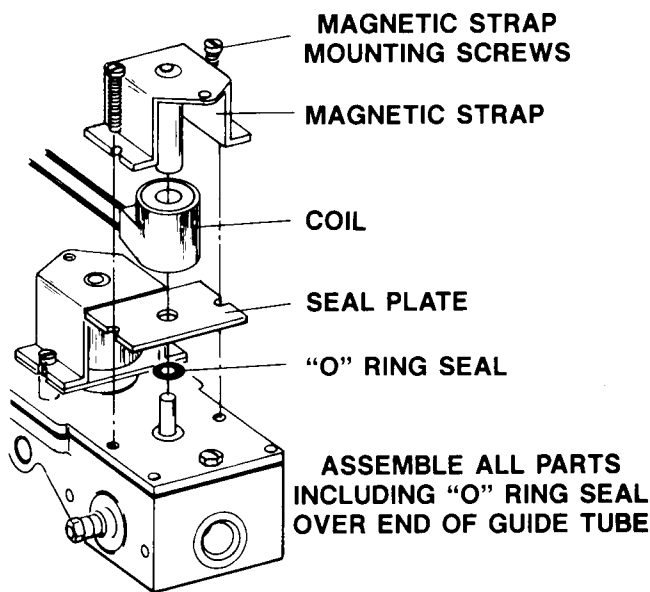
GAS TYPE	BTU PER CU. FT.	PRESSURE INCHES	SPECIFIC GRAVITY	DRILL SIZE	MAIN BURNER ORIFICE	GAS DATA DECAL
NATURAL	1075	3.5	0.65	42	3-13375	3-11162
LPG	2500	11	1.53	54	3-13317	3-11167

## COIL REPLACEMENT

Individual gas valve coils are available.

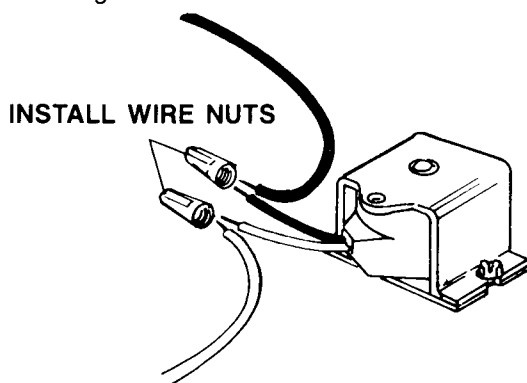
Should you encounter a condition where the flame will come on the first time but in subsequent tries, the flame will not come on, replace the holding and booster coils.

**CAUTION: SHUT OFF ELECTRICITY AND GAS UNTIL INSTALLATION HAS BEEN COMPLETED.**



1. Remove front panel.
2. Remove the two screws which hold the magnetic strap to the gas valve.
3. Cut the two leads of the coil being removed and strip one-half inch insulation from each end.  
NOTE: The leads should be cut as close to the coil body as possible.
4. Use wire nuts to splice the new coil leads into existing harness leads.

5. Assemble coil, seal plate, and "O" ring seal over end of guide tube.



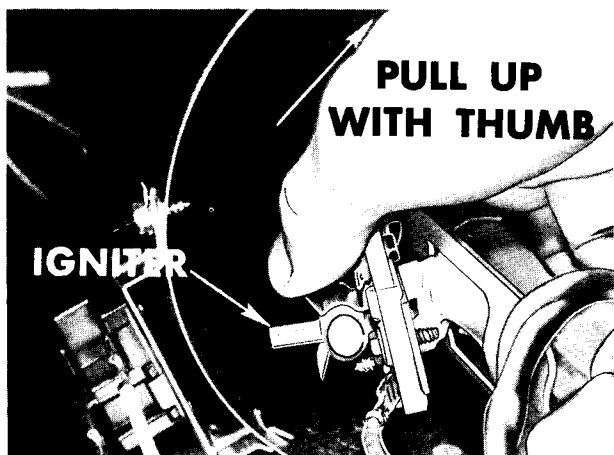
6. Carefully position coil assembly and guide tube over plunger.
7. Replace the two screws which hold magnetic strap to valve.
8. Check for gas leaks, using liquid leak detector.

## IGNITER

The igniter is used to ignite the gas as it comes from the gas valve. It is located on the left side of the burner (as viewed from the front of the dryer). The igniter is very fragile and must be handled carefully. Should you find an igniter which has shattered, replace igniter. Operate dryer and see if igniter stays on. If igniter stays on longer than 40 seconds, replace radiant sensor.

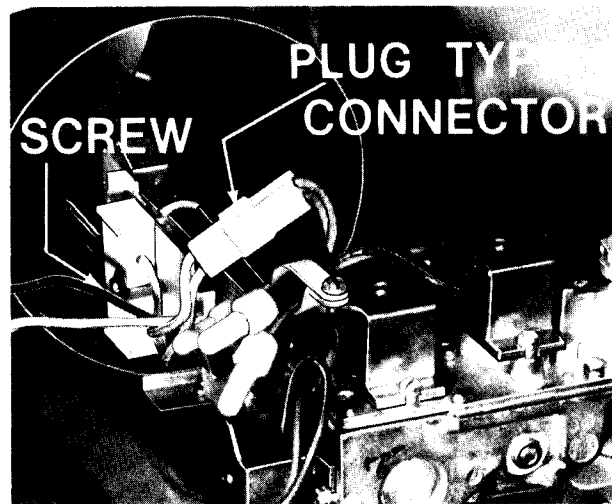
## ROUND IGNITER

1. Remove front panel.
2. Push the top clip retainer up with the right thumb. Do not overexpand clips as a loose connection between the igniter and clips may cause erratic operation.
3. Carefully remove igniter with left hand.  
NOTE: If necessary, a pair of snap ring pliers can be used to spread the clip.



## FLAT IGNITER

1. Remove front panel.
2. Unplug igniter from gas valve (plug type connector).
3. Remove screw and washer holding igniter to burner.



## RADIANT SENSOR

The radiant sensor acts much like a thermostat.

1. Remove front panel.
2. Remove wires from sensor.
3. Remove screw holding sensor to heat cone.
4. Pull tab on sensor bracket from slot in heat cone.

## HIGH LIMIT THERMOSTAT

The hi-limit thermostat is many times referred to as the safety thermostat. This thermostat is located close to the heat source.

If a dryer is cycling on the hi-limit thermostat, check for restrictions in the air flow pattern.

1. Remove front panel.
2. Loosen back screw.
3. Remove front screw.
4. Remove wires and slide thermostat out.

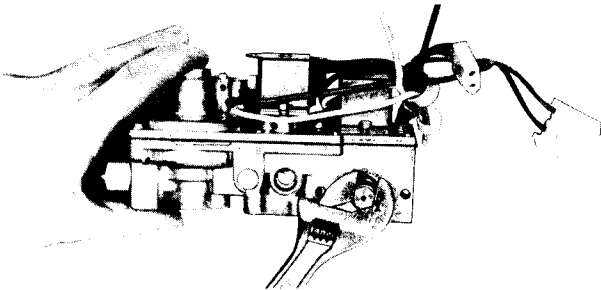
## GAS VALVE REMOVAL.

1. Remove front panel.
2. Shut off gas supply and disconnect supply line to valve.
3. Remove two screws holding valve and burner assembly to base.
4. Disconnect wire harness.

5. Disconnect wires from radiant sensor located on heat cone.
6. Remove wires from hi-limit thermostat.
7. Slide valve bracket out of slot in base and remove valve and burner assembly.
8. Remove three screws holding valve bracket and burner to underside of gas valve.

## ORIFICE

The orifice can be removed with a 3/8" wrench.



## HEAT CONE

1. Remove front panel.
2. Remove gas valve.
3. Remove screw in front of cone holding cone to base.
4. Remove one screw at back of cone holding cone tab to inlet air duct.
5. Pull cone out of dryer.

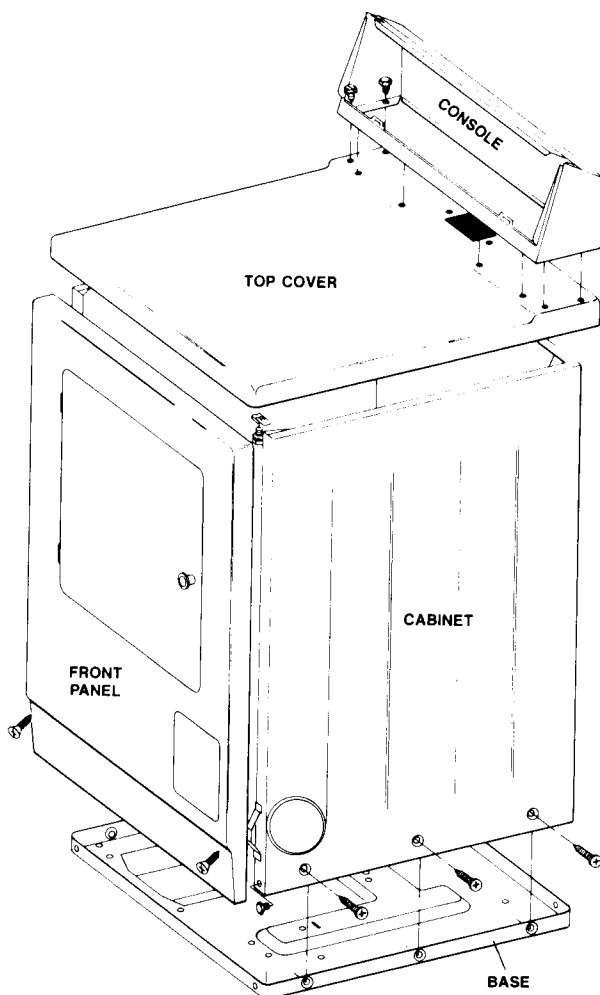
## INLET DUCT

See page

## MANOMETER CHECK

The gas valve pressure can be checked with a manometer. For further information, refer to the Mechanical and Electrical Trouble Shooting Guide. Part No. 56186.

# Cabinet and Top Cover



## CONSOLE

1. Remove control panel assembly.
2. Remove eight screws, two on each side and four across the front, holding console to top cover.

## TOP COVER

1. Remove front panel.
2. Remove two screws (one in each front corner) which hold top cover to cabinet.
3. Remove main wire harness wiring from components on control panel.
4. Remove control panel assembly.
5. Pull main wire harness through opening in top cover.
6. Remove console.
7. Push top cover back to disengage from cabinet and remove top cover.

## CABINET REMOVAL

1. Remove front panel.
2. Remove top cover assembly.
3. Remove tumbler.
4. Remove tumbler rear.
5. Remove six screws (three on each side) holding cabinet to base frame. Remove screws at front corners and across back. Remove cabinet.

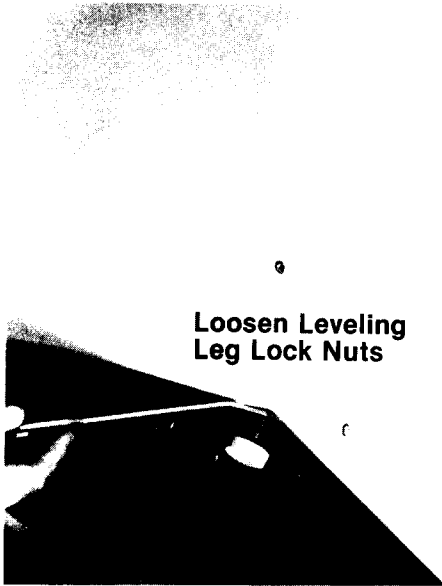


# Section 4

## Pre-Installation & Installation

### STEP 1 PREINSTALLATION

1. Remove tape holding the door closed and pull on strip of tape between door and cabinet to open door.
2. Remove door knob and screw from accessory package.
3. Install door knob. Do not overtighten screw.
4. Remove all tape on door and cabinet.
5. Tilt dryer backward. Loosen front leveling leg lock nuts and install rubber feet.



Loosen Leveling  
Leg Lock Nuts

6. Tilt dryer slightly forward. Loosen rear leveling leg lock nuts and install rubber feet.

### STEP 2 LOCATING DRYER

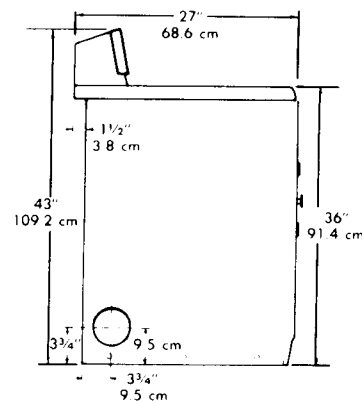
Dryer should be located as close to the washer as possible, considering availability of gas, electricity and location that makes exhausting practical.

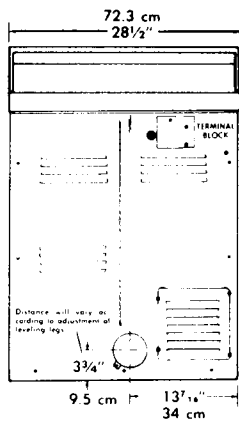
As a convenience, it is desirable to install the dryer to the left of the washer since the dryer door opens to the left and loading the dryer is easier. However, the dryer may be installed to either right or left of washer. Exhaust may be out the rear, the left side or through the base and down through the floor. Dryer cannot be exhausted through the right side.

For proper operation, it is important to make sure the room where dryer is located has adequate make-up air. This is especially important in any areas such as bedroom, bathroom or closet.

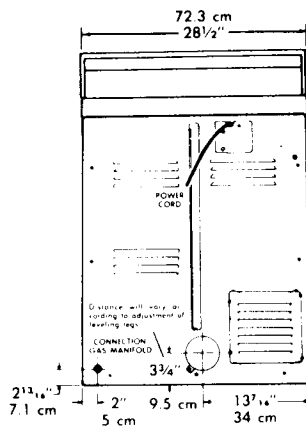
On gas dryers, adequate clearance must be maintained to insure adequate air for combustion and proper operation of the dryer. The area where the dryer is located must not obstruct the flow of combustion or ventilating air. When locating a Maytag dryer, the following dimensions should be taken into consideration.

When installing the dryer the following minimum clearances to combustibles shall apply: clearance to wall: sides — 0 inches, top — 0 inches with outside exhaust, rear — 0 inches with outside exhaust, 6 inches with inside exhaust.





**ELECTRIC**



**GAS**

Plus space between cabinet and floor.

## STEP 3 EXHAUSTING

**DO NOT EXHAUST DRYER INTO ANY WALL, CEILING, CRAWL SPACE OR A CONCEALED SPACE OF A BUILDING, VENT CONNECTION, GAS VENT OR CHIMNEY. THIS COULD CREATE A FIRE HAZARD FROM LINT EXPELLED BY THE DRYER. FOR THE SAME REASON, WE RECOMMEND ONLY METAL EXHAUST DUCT TO MINIMIZE RESTRICTED AIR FLOW AND RELIABLY INSURE THE CONTAINMENT OF EXHAUST AIR, HEAT AND LINT. NEVER INSTALL A SCREEN OVER EXHAUST OUTLET. NEVER USE PLASTIC OR OTHER COMBUSTIBLE DUCTWORK. AT LEAST ONCE A YEAR, INSPECT AND CLEAN INTERIOR OF DUCTWORK. FREQUENTLY CHECK AND CLEAN VENT HOOD TO ASSURE PROPER OPERATION.**

A clothes dryer produces combustible lint and the area around the clothes dryer should be kept free of lint. It is recommended that the dryer be exhausted to the outside using 4" rigid or flexible metal ducting.

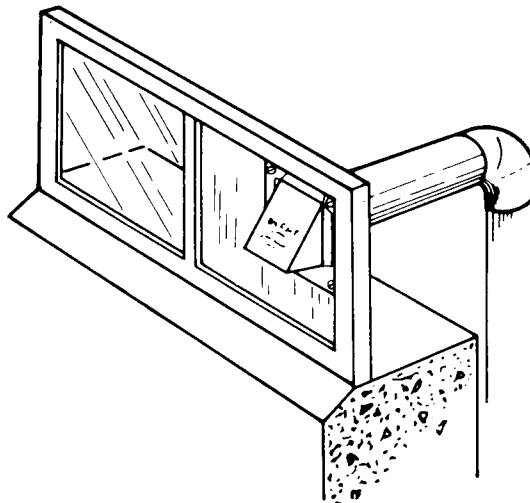
When located in a bedroom, bathroom or closet, the dryer must be exhausted to the outside of the dwelling.

Once location of the exhaust outlet is determined, a 4-1/4" hole should be cut in the wall to accept the exhaust hood. To permit sufficient air circulation under the exhaust hood, there should be no less than a 12" clearance between the bottom of the exhaust hood and the ground. When possible, the exhaust hood should not exhaust directly into a window well. **DO NOT** terminate exhaust under a house or porch.

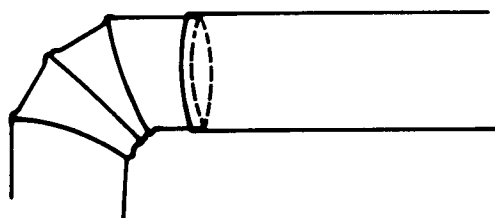
**NOTE:** Where the exhaust hood is to be installed through masonry, a special masonry saw is necessary to cut the hole.

Install the exhaust hood and secure with screws to the outside wall and seal with caulking compound.

The exhaust hood may also be installed through a window by installing a window plate. Window plates are available from The Maytag Company. Install as shown.



Install ductwork from the dryer to exhaust hood. All joints must be made so exhaust end of one pipe is inside the intake end of next pipe. On flexible metal ductwork, all joints should be secured with a 3-4630 clamp. **DO NOT** use sheet metal screws when assembling rigid ducting. These should be taped.



## FLEXIBLE DUCTWORK LIMITATIONS

Flexible metal ductwork should not exceed 34' of straight 4" ducting. The exhaust hood is equivalent to 8' of duct and each 90 degree bend is equivalent to 8'. As an example, if an exhaust hood is used and two 90 degree bends, the maximum straight run would be 10'.

**NOTE:** If the radius of a bend with 4" duct is 12" or greater, the bend can be considered a straight run. No more than three 90 degree bends should be used in any run with an exhaust hood.

## RIGID DUCTWORK LIMITATIONS

Rigid metal ductwork should not exceed 50' of straight 4" duct. Each 90 degree elbow and the exhaust hood should be considered equivalent to 8' of straight ductwork. For example, if an exhaust hood and two 90 degree elbows are used, the maximum straight duct allowed would be 26'. Not more than three 90 degree elbows should be used in any rigid ductwork run with an exhaust hood. Four feet of straight duct should be allowed between 90 degree elbows.

## GUIDE FOR PROPER EXHAUSTING

1. Keep the duct as short as possible. The longer the duct the more friction and resistance to air flow.
2. Keep the number of elbows and the degree of bend to a minimum to minimize air resistance due to dynamics. We recommend that not over 3 elbows be installed in the duct.
3. The smoother the inside surface of the duct, the less the friction and the greater the air flow. It is because of this that we recommend using smooth rigid aluminum ductwork. Flexible ductwork has a spiral washboard surface which increases friction and sets up dynamic turbulence which decreases air flow.
4. Never reduce the area of the duct. A 4" round duct has an area of approximately 12.57 square inches. The area of the duct should never be reduced below this figure.
5. Dryers should be exhausted to the outside of the building.
6. Do not exhaust dryer into any wall, ceiling, crawl space, a concealed space of a building, vent connection, gas vent or chimney. A lint accumulation in such an area creates a fire hazard.

7. When located in a bedroom, bathroom or closet, the dryer must be exhausted to the outside of the dwelling.
8. Do not install vent hood at ground level. There should be a 12" (30.5cm) clearance between the bottom of the exhaust hood and the ground.
9. All exhaust duct joints should be taped to prevent lint and moisture laden air from being expelled into the building.
10. The exhaust duct and vent hood should be checked periodically and cleaned as necessary to prevent a lint build-up.

CHART I

CFM Air Flow	Performance	Length of Straight Duct	
		Rigid	Flexible *Note 2
160+	Best	23'	13'
150	Good	34'	18'
140	Acceptable	45'	26"
130	Marginal *Note 1	50'	34'

\*Note No. 1

Chart lists this as the maximum for "marginal" operation. Under this condition, the exhaust duct and vent hood must be free of lint, the lint filter must be clean and the dryer must not be overloaded. If any of these conditions are not met, the dryer could cycle on the hi-limit thermostat extending the dry time. It is for this reason that we list this as "marginal" operation and the maximum ducting.

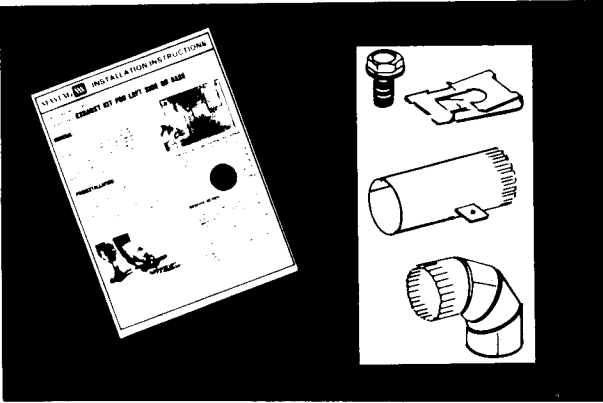
\*Note No. 2

The figures for flexible duct apply only to the 3-4353 flexible metal duct available as an accessory. For other types of flexible metal ducts, refer to manufacturer's design data concerning air friction loss. Friction loss in inches of water, as measured by a manometer, should never exceed .58" of water column.



## LEFT SIDE OR BASE EXHAUST

If dryer is to be exhausted out the left side or through base, use the accessory 3-4652 exhaust kit, available from The Maytag Company, instructions are included with the kit.



## NONEXHAUSTED INSTALLATIONS

Always exhaust gas dryers to the outside.

**NOTE: IN CANADA, ALL DRYERS MUST BE EXHAUSTED TO THE OUTSIDE.**

**IF THE DRYER IS NOT EXTERNALLY EXHAUSTED, SOME FINE LINT WILL BE EXPELLED INTO THE LAUNDRY AREA. AN ACCUMULATION OF DUST OR LINT IN ANY AREA OF THE HOME CREATES A FIRE HAZARD. THE HOME OWNER SHOULD BE AWARE OF THIS HAZARD AND INSTRUCTED ON FREQUENT CLEANING OR VACUUMING OF THE LINT ACCUMULATIONS.**

If the installer has determined that a nonexhausted installation will be made, a 3-3736 exhaust deflector should be installed. Maintain a 6" clearance between the back of the control panel and the wall.

**NOTE: A dacron mesh lint bag, Part No. 3-11353, is available from The Maytag Company for use on nonexhausted installations. Although the lint screen and the lint bag will retain most of the lint expelled, a certain amount of lint will be expelled into the laundry area. AN ACCUMULATION OF LINT CREATES A FIRE HAZARD. THEREFORE, FREQUENT CLEANING OR VACUUMING OF THE LINT ACCUMULATION IS NECESSARY.**

## ADDITIONAL FACTS ABOUT EXHAUSTING

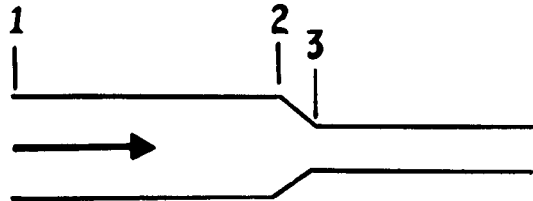
These large capacity Maytag dryers are designed to move 180 cubic feet of air per minute. As exhaust ducting is added, it imposes resistance to the flow of air which must be overcome by the dryer exhaust fan. This resistance is due to static, velocity and dynamic pressure which is expressed in inches of water column as measured by a manometer.

There are two types of pressure losses:

(1) Static or friction losses and (2) velocity or dynamic losses.

A. Static or friction losses. (We will refer to this as friction.)

Friction losses are caused by the actual rubbing of the air molecules along the sides of the duct. Pressure losses in straight runs of duct are referred to as friction losses. The pressure would drop due to friction losses between points 1 and 2 of the duct in the following drawing.



B. Dynamic losses result from air turbulence which occur when the air flow changes direction or when there is a change in the cross-sectional area of the duct.

1. A change of cross-sectional area is illustrated in the above drawing. The reducer decreases the cross-sectional area which increases the velocity and results in dynamic pressure loss. The amount of friction through a reducer varies directly with the square of the velocity of air. This simply means that the resistance through a reducer is very high as compared to a straight run of duct.

Proper operation and efficient drying is dependent upon proper air flow. The dryer is designed for use of a 4" duct and reductions in the duct are not recommended.

2. Dynamics

Between 2 and 3 in the drawing, a reducer has been added to the duct. The reducer opposes the air flow and sets up air turbulence

which results in a pressure loss.

These Maytag dryers are designed to move 180 CFM of air per minute as they are received. As exhausting is added, this air flow is decreased. Chart 1 on page is provided as a quick reference guide as to allowable lengths of duct and their effect upon air flow and dryer efficiency. There are many factors influencing air flow such as the considerations listed under Guide for Proper Exhausting. In addition to these items, the operator's practices also affect air flow, efficiency and the resulting drying times.

- a. Failure to clean the lint filter regularly will result in a reduction in air flow and will cause the dryer to take longer to dry the clothes.
- b. Overloading restricts proper air flow through the drum which will also decrease efficiency and extend the dry time.

## STEP 4 GAS CONNECTION

Gas operated dryers are equipped with a burner orifice for operation on NATURAL gas. If the dryer is to be operated on LP gas, it must be converted correctly for safety and proper performance. Conversion kits from NATURAL to LPG, or LPG to NATURAL are available. If other conversions are required, check with local gas utility for specific information concerning conversion requirements.

**NOTE: The conversion should always be performed by a qualified service technician.**

A 1/2" gas supply line is recommended and must be reduced to connect to the 3/8" gas line on the dryer.

Additionally, a 1/8" N.P.T. (National Pipe Thread) plugged tapping, accessible for test gage connection, must be installed immediately upstream of the

gas supply connection to the dryer. Refer to your local gas utility or plumbing contractor should you have questions on the installation of the plugged tapping.

The dryer and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of the system at test pressures in excess of 1/2 P.S.I.G.

The dryer must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 P.S.I.G.

In other words, if the test pressure is above 1/2 P.S.I.G., disconnect pipe for dryer before testing pipe. If it is less than 1/2 P.S.I.G. it's ok to leave connected but shut off internal shut-off valve in dryer.

The gas supply should be connected to the dryer using pipe joint compound or a Teflon® tape on male thread connections.

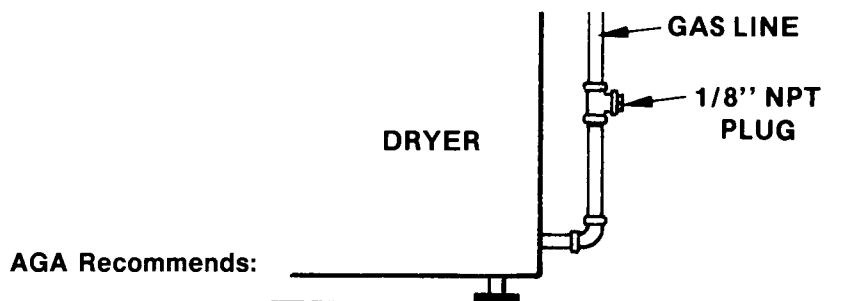
**NOTE:** Any pipe joint compound used must be resistant to the action of any liquified petroleum gas.

Turn on gas supply and open the shutoff at the gas valve. Check all gas connections for leaks using a soap solution. If bubbles occur, tighten connections and recheck. **DO NOT use an open flame to check for gas leaks.**

**NOTE:** As a courtesy, many local gas utilities will inspect a gas appliance installation. Check with your utility to see if this service is provided in your area.

## GAS IGNITION

This dryer uses an automatic ignition system to light the main burner when the dryer is turned on.



## STEP 5 ELECTRICAL REQUIREMENTS

OBSERVE ALL NATIONAL  
ELECTRICAL CODES AND LOCAL  
CODES AND ORDINANCES

### ELECTRICAL SERVICE — GAS MODELS 120 VOLTS, 60 HZ ONLY

A 120 volt, 60 Hz, 15 ampere fused electrical supply is required. An individual branch (or separate) circuit serving only this appliance is recommended. **DO NOT USE AN EXTENSION CORD** unless it meets all requirements as outlined for grounding, polarizing (3-wire) and capacity. Wire size should be at least No. 14.

**BEFORE PLUGGING IN POWER CORD, OPERATING, OR TESTING, follow grounding instructions in Grounding Section.**

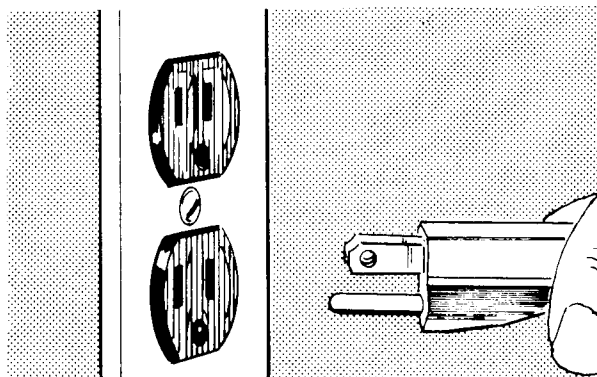
### GROUNDING — 120 VOLTS, 60 HZ

#### IMPORTANT SAFETY PRECAUTIONS

**WARNING** — To prevent unnecessary risk of fire, electrical shock or personal injury, all wiring and grounding must be done in accordance with the National Electrical Code and local codes and ordinances. It is the personal responsibility and obligation of the appliance owner to provide adequate electrical service for this appliance.

#### ELECTRICAL GROUND IS REQUIRED ON THIS APPLIANCE

This appliance is equipped with a power supply cord having a 3-prong grounding plug. For your safety, this cord must be plugged into a mating 3 prong type wall receptacle which is **properly wired, grounded and polarized.**

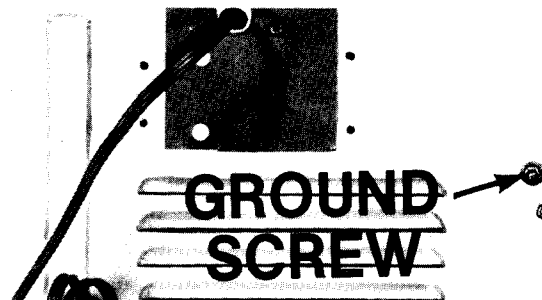
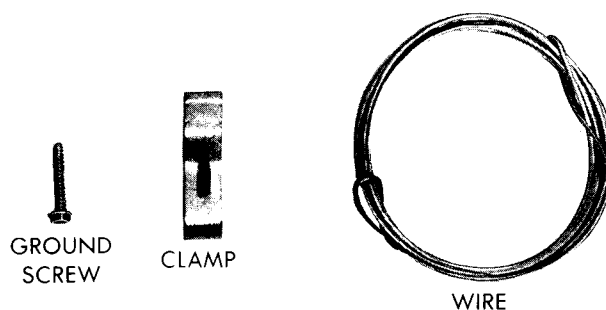


If a mating wall receptacle is not available. Contact a qualified electrician to have the wall receptacle replaced. If there is any question, local building officials or electrical utility should also be consulted.

*DO NOT UNDER ANY CIRCUMSTANCES, REMOVE THE ROUND GROUNDING PRONG FROM POWER SUPPLY CORD.*

#### ADDITIONAL GROUND PROCEDURE — WHERE LOCAL CODE PERMITS.

An external ground wire, clamp and screws are provided for assistance in meeting local codes. Where approved, it is recommended this additional ground be installed. A proper external ground **MUST** be determined prior to wire hookup. Consult local building officials and qualified electrician in the event any questions exist.



**ALL GROUNDING AND WIRING MUST BE DONE IN ACCORDANCE WITH NATIONAL AND LOCAL CODES.**

## U.S. MODELS

**THE NATIONAL ELECTRICAL CODE ANSI/NFPA NO. 70-1981.**

## CANADIAN MODELS

**THE CANADIAN ELECTRICAL CODE C.22.1 PART 1 AND LOCAL CODES.**

## ELECTRICAL SERVICE — 50 HZ

A product manufactured for 120 volt, 50 Hz or 230 volt, 50 Hz, must be used on the voltage and frequency it was designed for. It should be operated on an individual branch circuit and fused by no less than 15 ampere fuse or circuit breaker. Export models may require the addition of a plug on the power cord. It is the responsibility of owner to insure wiring of power cord and receptacle has been done properly. Consult local utility or qualified electrician.

## GROUNDING — 50 HZ

### IMPORTANT SAFETY PRECAUTIONS

**WARNING** — To prevent unnecessary risk of fire, electrical shock or personal injury, all wiring and grounding must be done in accordance with local electrical codes.

### ELECTRICAL GROUND IS REQUIRED ON THIS APPLIANCE

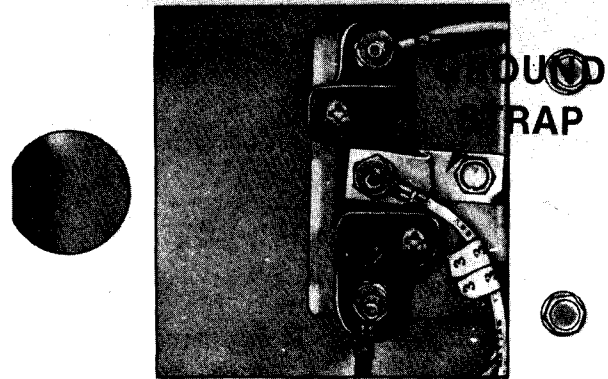
Due to variation of electrical services overseas, specific grounding instructions must be determined by the owner and at the point of installation.

An external ground wire, clamp and screws are provided for assistance in meeting local codes. Where permitted by local code, use these as additional grounding provisions.

Consult local utility or qualified electrician before all ground connections are made. **DO NOT** plug in, operate or test appliance until proper instruction is obtained and the appliance has been properly grounded.

## ELECTRIC MODELS UNITED STATES ONLY

Electric models are equipped with a ground strap for grounding the dryer, which is connected at the factory to the P2 terminal post. To avoid the possibility of electrical shock, the dryer must not be connected to a 120 volt 2-wire circuit.



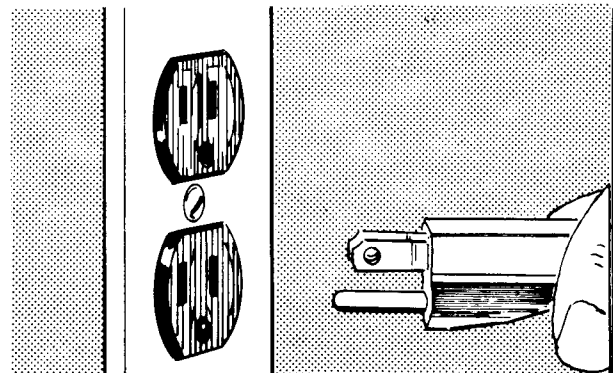
The use of the ground strap is permitted by the national electrical code; however, if use of the ground strap is prohibited by local codes, the dryer must be grounded in accordance with local codes.

## STEP 6 ELECTRICAL CONNECTIONS

## GAS MODELS

Maytag gas operated dryers are designed for operation on 120 volt, 60 Hz AC approved electrical service, protected by a 15 amp fuse or comparable circuit breaker.

On gas models, the electrical power cord comes already attached to the dryer. Plug the power cord into a nearby 120 volt, 3-prong properly wired grounded receptacle.



## ELECTRIC MODELS

### CANADIAN MODELS — 120/240 VOLT

**ALL CANADIAN MODELS ARE SHIPPED WITH THE POWER CORD ATTACHED**

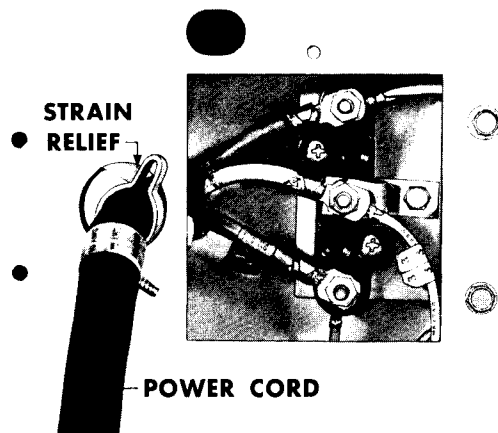
The dryer power cord should be plugged into a 30 amp receptacle and fused through a 30 amp fuse on both sides of the line.

**NOTE:** It is not permissible to convert a dryer in Canada to 208 volts.

### U.S. MODELS — 120/240 VOLT OR 120/208 VOLT

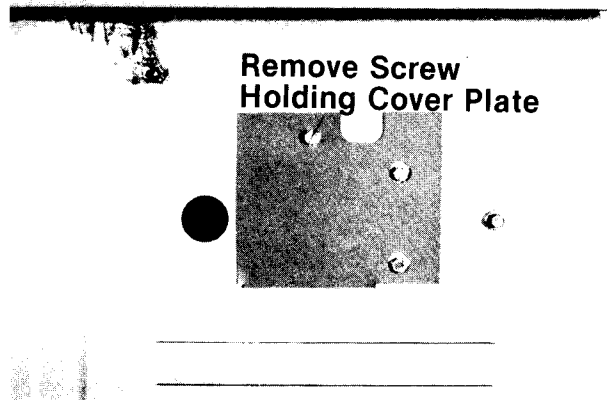
Maytag electric dryers are manufactured to operate on 120/240 volt, 60 Hz AC approved electrical service. Should the dryer be operated on a 208 volt electrical system, the dryer must be converted. The Maytag Company makes a heating element kit available, Part No. 3-4837, which is used to convert the dryer from a 240 volt to a 208 volt system.

The circuit should be fused through a 30 amp fuse or comparable circuit breaker, on both sides of the line. The service cord receptacle should be wired with no smaller than a No. 10 wire and be sure a strain relief is used.

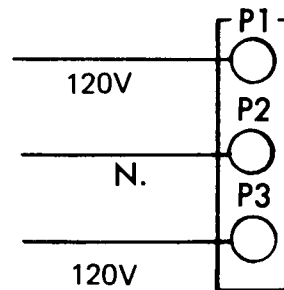


**NOTE:** The service cord is not provided with electric model dryers. Connect the power cord as follows:

1. Remove the terminal block cover plate on the back panel to the dryer to gain access to the terminal block.



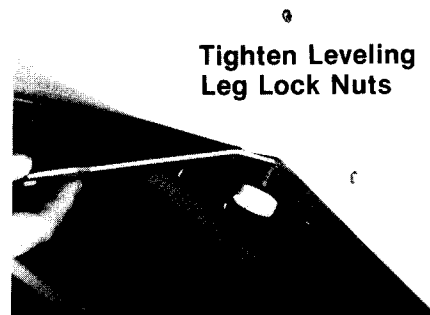
2. The neutral line of the service cord must always be connected to the P2 service post. The two 120 volt lines of the service cord then go to the P1 and P3 terminal block posts as shown.



3. Be sure terminal block nuts are tight and replace terminal block cover.
4. Plug power cord into receptacle.

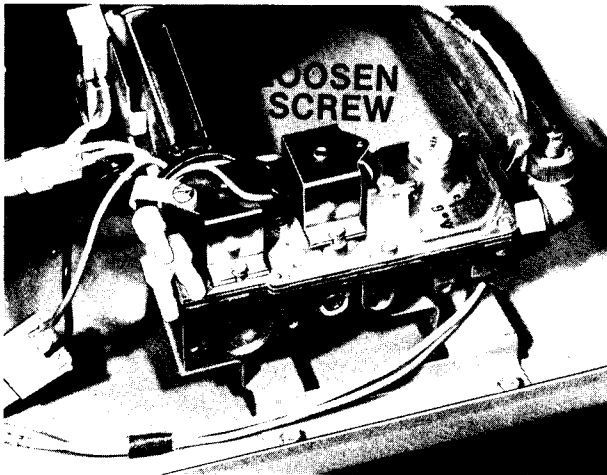
## STEP 7 LEVELING

1. Move dryer into location.
2. Level dryer. Adjust as necessary to match height of automatic washer.
3. Tighten leveling leg lock nuts against base on both front and rear leveling legs.
4. Operate dryer to test installation.



## ADJUSTING MAIN BURNER

To adjust main burner flame, loosen screw holding air shutter and rotate shutter until a yellow flame appears. Then reverse the rotation of the shutter until the yellow disappears and the burner has a steady blue flame. To achieve this, it may be necessary to adjust the flame until only a very small yellow flame is at the tip of the blue flame. After a period of about five minutes, all of the yellow should disappear. If not, readjust the shutter slightly. When the desired results are achieved, tighten the screw to lock the shutter in place.



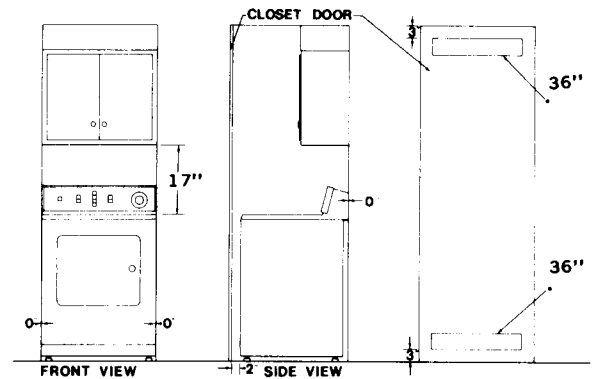
## ADDITIONAL INFORMATION

### ALCOVE OR CLOSET INSTALLATION

When the dryer is to be installed in an alcove area or a closet, clearance should be provided around the dryer for an adequate air supply and for ease of installation and servicing. Clearances for the companion automatic washer should also be considered. An appliance installed in a closet shall have no other fuel burning appliance installed in the same closet. The dryer must be exhausted to the outside to minimize excessive lint accumulation and to maintain good drying. We recommend allowance for more clearance than the minimum installation clearances as shown.

#### Make up air openings

Each opening area must have a minimum of 36 square inches (more is better). These openings



Make up air openings

must not be obstructed. (Louvered door with equivalent air opening is acceptable.)

## MOBILE HOME INSTALLATION

Maytag dryers are certified by the American Gas Association and bear a label stating they are suitable for installation in mobile homes.

When installed in mobile homes, the installation must conform to the Federal Standard for Mobile Home Construction and Safety, Title 24 HUD (Part 280), 1976 or when such standard is not applicable, with the Standard for Mobile Homes ANSI/NFPA NO. 501B-1977.

When installing a dryer in a mobile home, provisions for anchoring the dryer to the floor must be made. An anchor bracket kit is available, Part No. 3-3740. Electric dryers should also be secured. Instructions for installing the anchor brackets are contained in each kit.

All mobile home installations must be exhausted to the outside with the exhaust duct termination securely fastened to the mobile home structure, using materials that will not support combustion. Exhaust the dryer using rigid/flexible aluminum exhausting materials, and locate in an area that provides adequate make-up air. The exhaust duct must not terminate beneath the mobile home.

## ODD CYCLE OPERATION

This Maytag dryer is manufactured for operation on 60 Hz AC approved electrical service. The dryer is not designed for use on 50 Hz AC electrical service and conversion of the product from 60 to 50 Hz operation is not recommended. For additional information on 50 Hz products, write AMERICAN STEEL EXPORT COMPANY, 310 MADISON AVENUE, NEW YORK, NEW YORK 10017.

## INSTALLATION ACCESSORIES

- |       |  |         |  |
|-------|--|---------|--|
| 59128 | Vent kit — standard — 4" (10.16cm) — kit includes two elbows, three pipes and one vent hood. | 59143   | Flexible vent kit — contains wide opening vent hood, wall plate, two clamps and flexible aluminum vent duct. |
| 59129 | Vent hood — 4" (10.16cm) opening.  | 3-3736  | Exhaust deflector kit.   |
| 59130 | Aluminum pipe — 4" x 24" (10.16cm x 60.96cm).  | 3-4353  | Flexible aluminum vent duct — 4" (10.16cm) diameter — 38" (81.28cm) length stretches to 8' (2.44m).          |
| 59131 | Aluminum elbow — 4" (10.16cm).   | 3-4630  | Clamp for flexible aluminum duct.  |
| 59133 | Aluminum window plate — 12" x 18" (30.48cm x 45.72cm) — 4" (10.16cm) hole.                   | 3-4652  | Exhaust duct kit for base or left side exhausting.   |
| 59134 | Aluminum window plate — 15" x 20" (38.10cm x 50.80cm) — 4" (10.16cm) hole.                   | 3-11353 | Dacron lint bag.   |
|       |  | 3-13272 | Bracket for exhaust deflector.   |
|       |  | 2-11294 | Screw — exhaust deflector bracket to cabinet back.   |

## PERSONAL SAFETY PRECAUTIONS

With a gas dryer, to prevent the possibility of hazard due to electrical shock, never plug dryer electric cord into a receptacle which is not adequately grounded and in accordance with local and national codes. See installation instructions with dryer.

Electric dryers with a UL symbol on the data plate have been listed with Underwriters' Laboratories, Inc.; those with a CSA symbol on the data plate have been listed with Canadian Standards Association. Gas dryers with an A.G.A. symbol on the data plate have been listed with The American Gas Association; those with a CGA symbol on the data plate have been listed with the Canadian Gas Association. Nevertheless, as with any equipment using electrical and moving parts, there is a potential hazard. To use this appliance safely, the operator should become familiar with the instructions for operation of the dryer and always exercise care while using the appliance.

1. To avoid possibility of fire or explosion:

- a. Items containing foam rubber (may also be labeled Latex foam) or foam rubber-like materials must not be dried on a heat setting. Foam rubber materials, when heated, can under certain circumstances produce fire by spontaneous combustion.
  - b. Any material on which you have used a cleaning solvent, or which is saturated with flammable liquids or solids, should not be placed in the dryer until all traces of these flammable liquids or solids and their fumes have been removed. There are many highly flammable items used in homes, such as: acetone, denatured alcohol, gasoline, kerosene, some liquid household cleaners, some spot removers, turpentine, waxes and wax removers.
2. CHILDREN SHOULD NEVER BE PERMITTED TO OPERATE, OR PLAY IN, WITH OR AROUND THIS DRYER.



# Section 5 Warranty & Replacement Parts

## PRODUCT WARRANTY AND REPLACEMENT PARTS POLICY

### PRODUCT WARRANTY

#### Full One Year Warranty

For **one (1) year** from the date of original retail purchase, any part which fails in normal home use will be repaired or replaced free of charge. This warranty applies when the appliance is located in the United States or Canada. Appliances located elsewhere are covered by the limited warranty, including parts which fail during the first year.

#### Limited Parts Warranty

During the **Second Year** from the date of original retail purchase, any part which fails in normal home use will be repaired or replaced free of charge for the part itself, with the owner paying all other costs, including labor.

#### Additional Limited Warranty Against Rust

Should any of the parts listed below rust during the five year period starting from the date of retail purchase, repair or replacement will be made free of charge during the first year. After the first and through the fifth year, repair or replacement will be made free of charge for the part itself, with the owner paying all other costs, including labor. Parts covered by this warranty are the exterior cabinet, including front door, the clothes tumbler and tumbler front and back.

#### How and Where to Receive Warranty Service

- Call or write the authorized Maytag dealer from whom the appliance was purchased or the authorized service firm designated by it.
- If the owner moves from the selling dealer's servicing area after purchase, call or write any authorized Maytag dealer or authorized service firm in or near the new location.
- Should the owner not receive satisfactory warranty service from one of the above, call or write Service Department, The Maytag Company, Netwon, Iowa 50208; and arrangements for warranty service will be made.

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This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

### REPLACEMENT POLICY ON REPAIR PARTS

It is Maytag's policy to replace at no charge any defective, genuine replacement part for one year from the date the part is replaced or for the balance of the original product warranty, whichever is greater. This policy applies only to the cost of the part itself, not to labor or transportation costs.

Return any defective parts to your regular Maytag parts source for replacement within 30 days from the date of failure. Tag each part returned with a completed Maytag Return Material Tag.

Transportation on replacement parts is F.O.B. Maytag parts source.



# RETURN MATERIAL TAG

The tag shown must be filled in completely and attached to each part being returned for warranty adjustment. Correctly filling out the tag will insure proper handling and processing of the adjustment.

If you are in need of Maytag Return Material Tags, please contact your normal parts source. They will be able to assist you in obtaining the tags.

**SEE INSTRUCTIONS ON BACK**

MAYTAG RETURN MATERIAL TAG	No. 416267	No. 416267	PART NO. 3-5306
	DEALER NAME LARRY'S MAYTAG HAC		SERIAL NUMBER 734017JE
STREET ADDRESS 19 SOUTH MAIN		CITY AND STATE NEWTON IA 50208	MODEL NUMBER DG 210
CUSTOMER NAME JOHN DOE		DATE PURCHASED 3-10-83	LTRS. SERIES 02
STREET ADDRESS WEST RIVER ST		DATE FAILED 1-3-84	CIRCLE YEAR OF FAILURE: ① 2 3 4 5 (SEE INSTRUCTIONS)
CITY AND STATE BAXTER IA 50028		REASON FOR RETURN—BE SPECIFIC— OPEN TIMER CONTACT	
<input type="checkbox"/> Repair or Exchange — Out of Warranty <input checked="" type="checkbox"/> Replace — In Warranty <input type="checkbox"/> Credit - Replacement Part Purchased on Invoice No.			

**MAYTAG RETURN MATERIAL TAG**

1. THIS TAG MUST BE FILLED IN COMPLETELY AND ATTACHED TO EACH PART RETURNED FOR WARRANTY ADJUSTMENT.
2. COMPLETE CUSTOMER ADDRESS MUST BE GIVEN. CUSTOMER MAY BE CONTACTED CONCERNING HIS SATISFACTION WITH THE ADJUSTMENT AND SERVICE.
3. SERIAL NUMBER MUST INCLUDE ALL LETTERS.
4. IF PART IS RETURNED FOR CREDIT, INVOICE NUMBER ON WHICH REPLACEMENT WAS PURCHASED MUST BE GIVEN. MAXIMUM DISCOUNT WILL BE DEDUCTED FROM CREDIT IF INVOICE IS NOT PROVIDED.
5. EXPLANATION OF YEAR OF FAILURE: 1-12 MONTHS 1ST YR., 13-24 MONTHS 2ND YR., 25-36 MONTHS 3RD YR., ETC. THROUGH 5TH YEAR.
6. REPLACEMENTS ARE F. O. B. FACTORY, BRANCH OR DISTRIBUTOR.
7. DEFECTIVE PARTS MUST BE RETURNED TO YOUR REGULAR PARTS SOURCE WITHIN 30 DAYS AFTER REPLACEMENT.

FORM NO. 0640-7H



# Section 6

## Specifications

<b>DIMENSIONS</b>	Height to top of control cover	43-5/8"	—	110.8cm
	Height to top of cabinet	36"	—	91.4cm
	Width	28-1/2"	—	72.4cm
	Depth (including 1-1/2" overhang)	27"	—	68.6cm

**CAPACITY** A full washer load is a full dryer load.

**MOTOR** 1/4 HP; 115 volt, 60Hz; thermoprotected, automatic reset motor used.

**AIR FLOW** 180 cu. ft. per minute exhausted from dryer.

**DRUM SPEED** 52 RPM on "08" & "09" models with original tumbler.  
47 RPM on "08" & "09" models with revised ribbed tumbler.  
47 RPM on "10" & "12" models.

**ROTATION** Clockwise when viewed from the front.

**EXHAUST RIGID ALUMINUM DUCTWORK**

1. Maximum length — 50 ft.
2. Subtract 8 ft. for each elbow used and the exhaust hood.
3. The dryer may be exhausted out the back, to the left side, or through the base. If exhausted out the left side or base, subtract an additional 5 ft. from the maximum length.

**FLEXIBLE ALUMINUM DUCTWORK**

1. Maximum length — 34 ft.
2. Subtract 8 ft. for each elbow used and the exhaust hood. For example, if an exhaust hood is used and two 90° elbows, the maximum straight run of flexible aluminum ductwork would be 10 ft.
3. A gradual bend (a radius of 12" or more) is considered as a straight run.
4. The dryer may be exhausted out the back, to the left side or through the base. If exhausted out the left side or base, subtract an additional 5 ft. from the maximum length.

## **HEAT SOURCE 1. GAS**

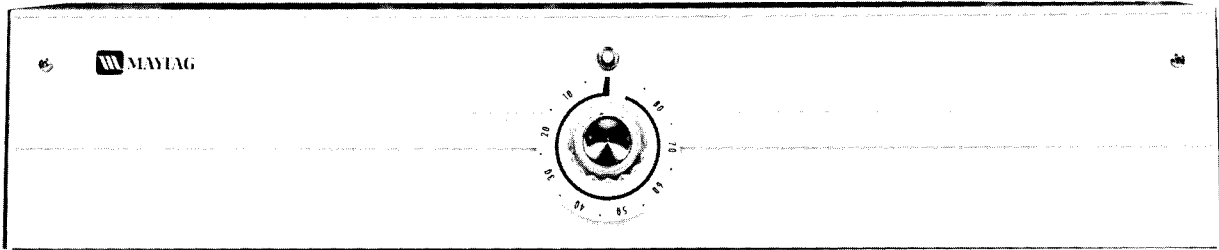
- a. Single port valve — capable of providing 22,000 BTU.
- b. Direct ignition by igniter bar.
- c. The circuit should be fused with a 15 amp fuse or comparable circuit breaker.  
Maximum draw is 6 amps.

## **2. ELECTRIC**

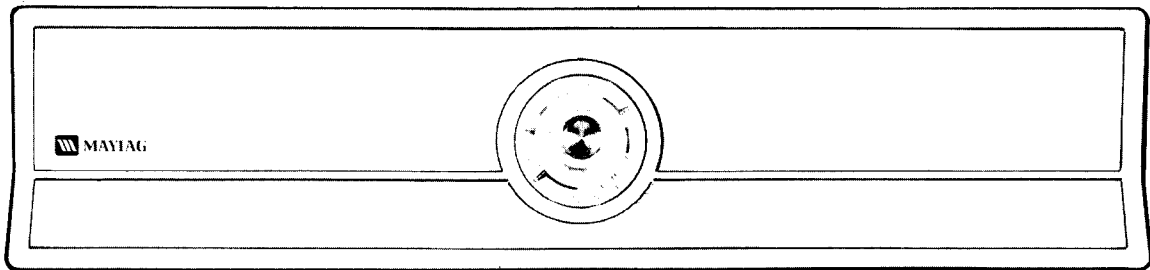
### **240 VOLTS**

- a. Nichrome helix coil rated at 5300 watts at 240 volts, A.C.
- b. Total wattage — including drive motor — 5600.
- c. The circuit should be fused with a 30 amp fuse or comparable circuit breaker on both sides of the line. Maximum draw is 25 amps.

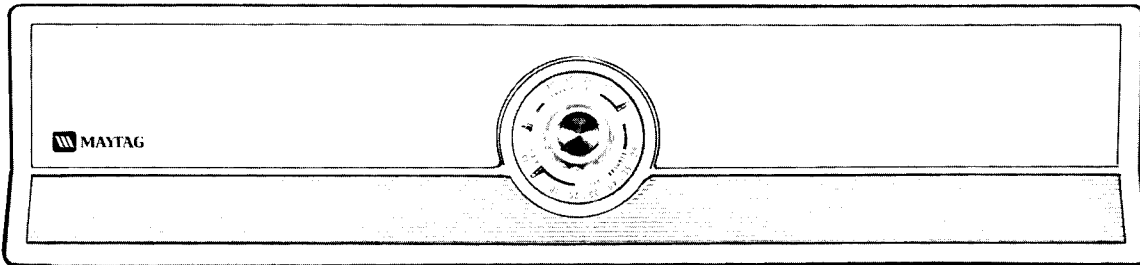
# "08" Models



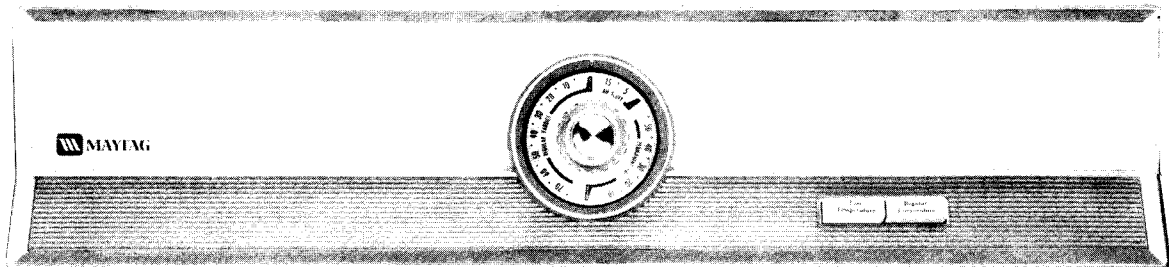
**DE91**



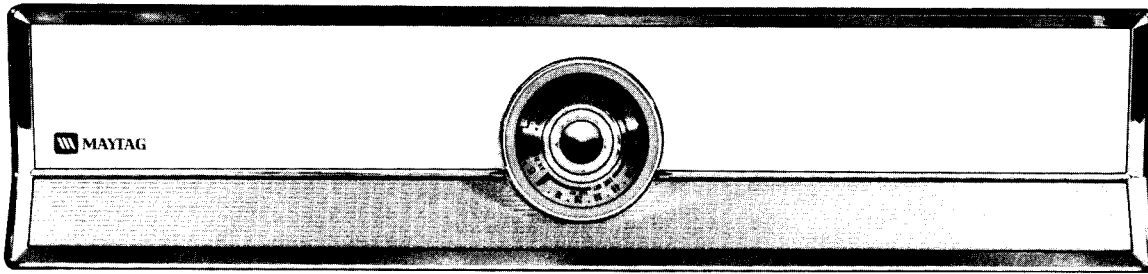
**DE - DG 106**



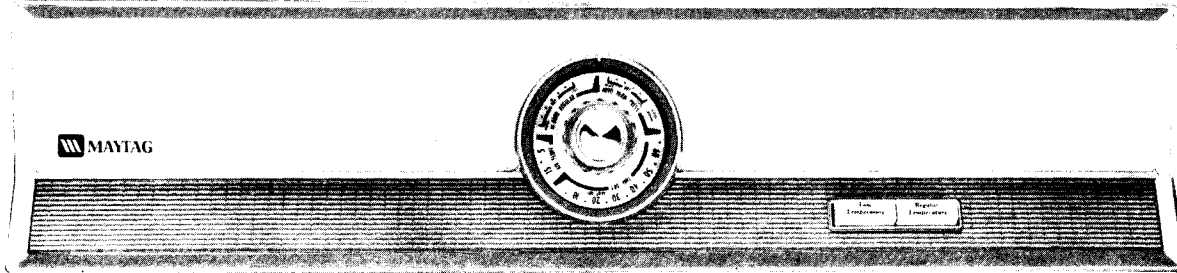
**DE - DG 107**



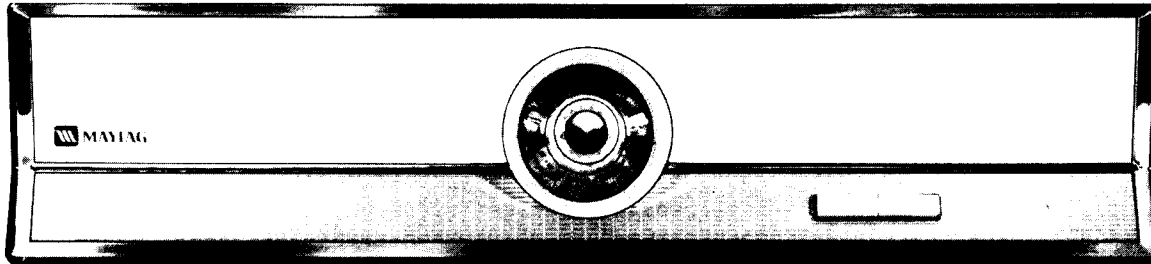
**DE - DG 308**



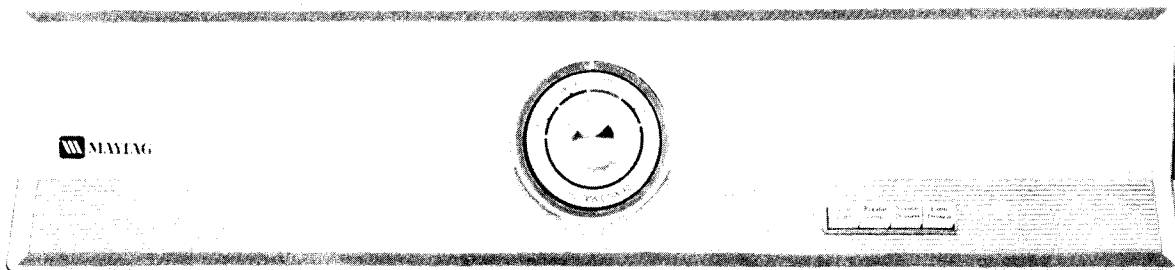
DE - DG 309



DE - DG 408

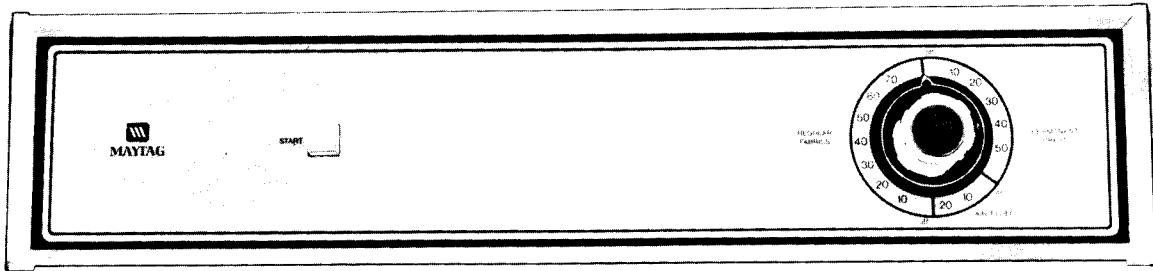


DE - DG 409

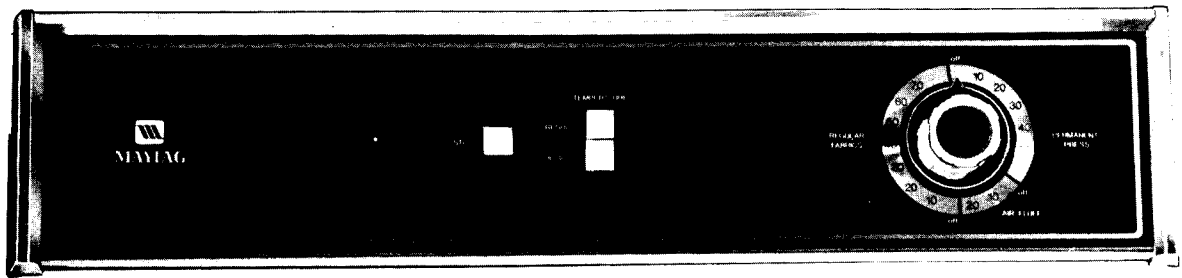


DE - DG 608  
DE - DG 808

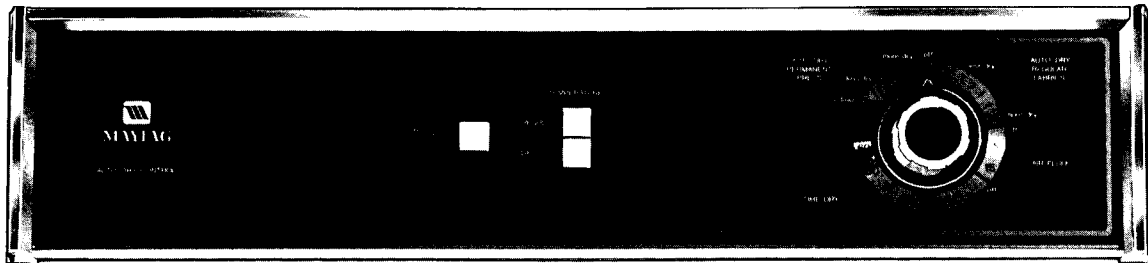
# "10" Models



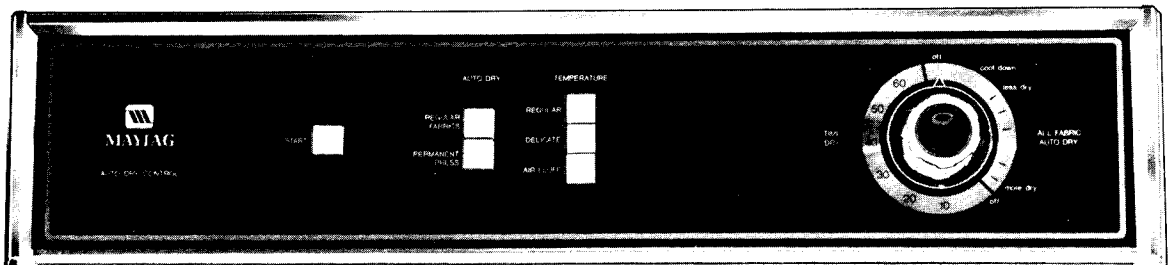
DE - DG 110



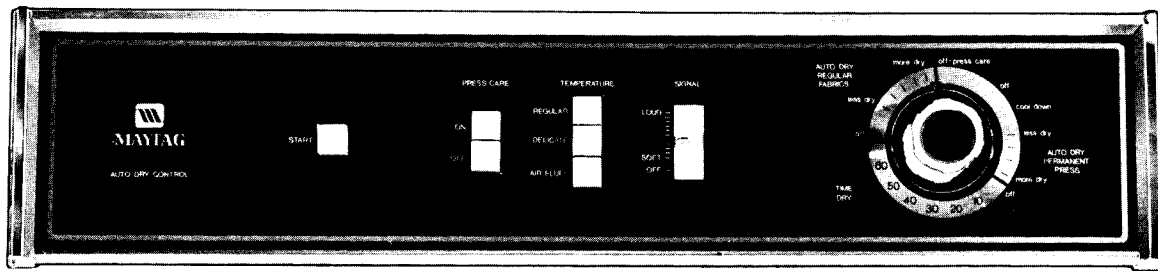
DE - DG 210



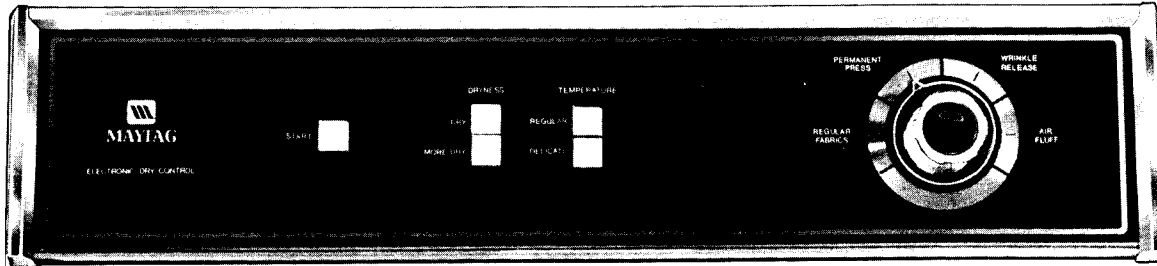
DE - DG 410



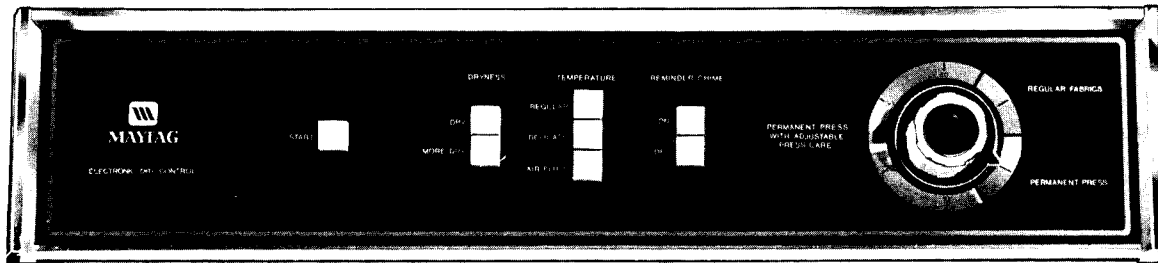
DE - DG 510



DE - DG 610

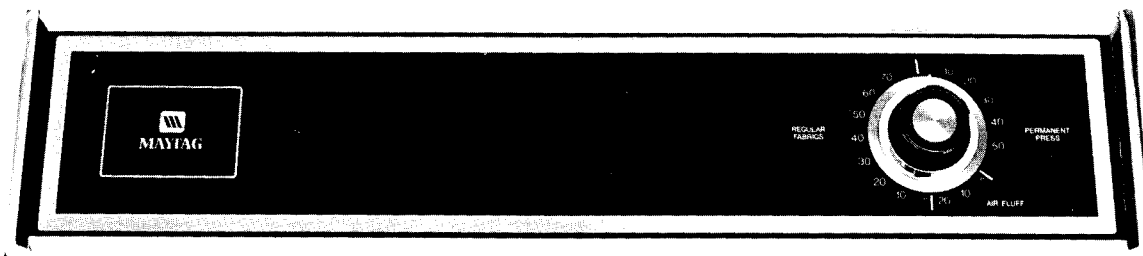


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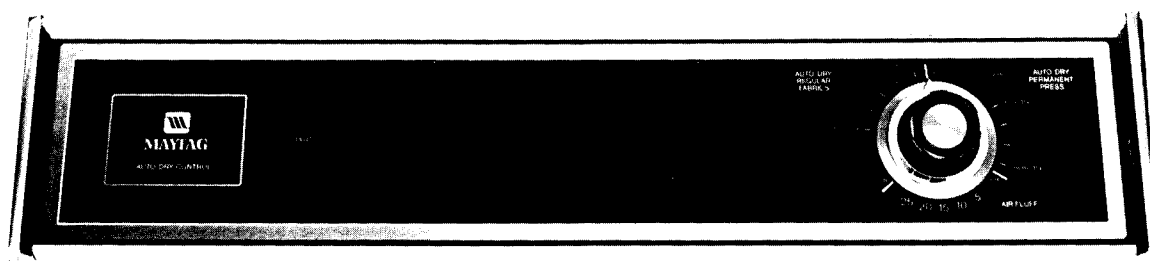


DE - DG 810

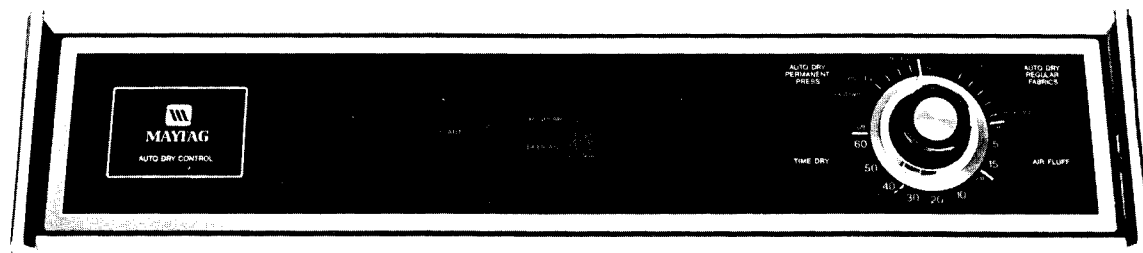
# "12" Models



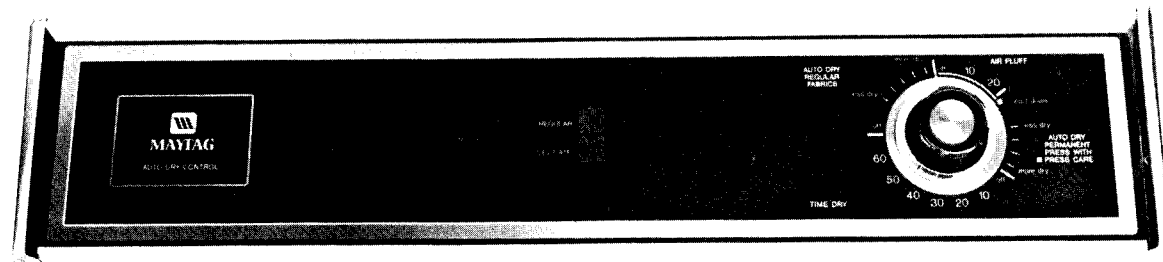
DE - DG 212



DE - DG 312

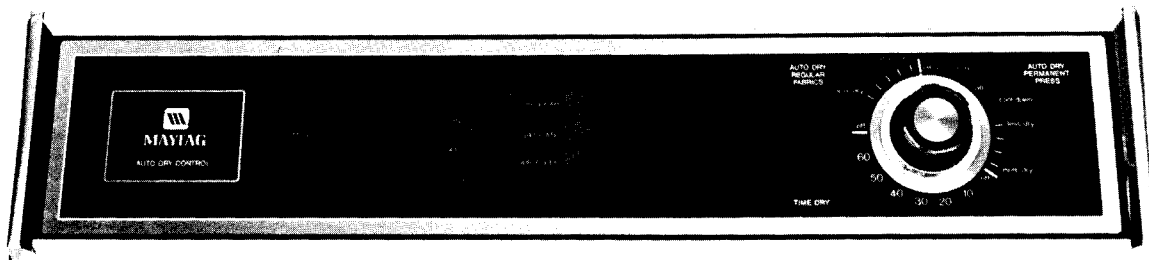


DE - DG 412

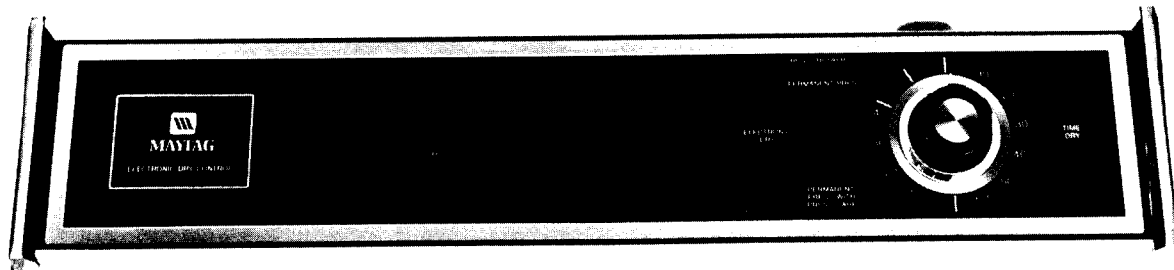


DE - DG 512





DE - DG 612



DE - DG 712

# FEATURE CHART

	DE91	D106	D107	D110	D210	D212	D308	D309	D312	D408	D409	D410	D412	D510	D512	D608	D610	D612	D710	D712	D808	D810	
Regular Cycle	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Permanent Press Cycle		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Air Fluff Cycle		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Controls Electronic Control																X			X			X	X
Auto-dry Control								X	X	X	X	X	X	X	X		X	X					
Time Control	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X			
Three Temp Selections					X		X										X	X	X				X
Two Temp Selections		X	X	X		X		X									X	X	X				
End of Cycle Signal								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Drum Light											X			X			X	X	X	X	X	X	X
Press Care Cool-Down																	X	X					X
Wrinkle Release																				X			
One Temp Selection	X																						

\* Available in Electric Only